

City of Peoria, Illinois
Deerbrook Drive Reconstruction
SWU Capital Improvement Project O2205

Addendum Number 1

March 6, 2025

The Specifications, Plans, Material Quantities, and Contract Proposal signed by the City Engineer on February 25, 2025 are modified by this addendum and shall be acknowledged in Article 3 of the Proposal.

SPEC. SECTION and/or PLAN SHEET(s)	DESCRIPTION
Special Provisions	The following pages are the Stormwater Pollution Prevention Plan that follows page 104 of the Specifications, Plans, Material Quantities and Contract Proposal.

STORMWATER POLLUTION PREVENTION PLAN

For Construction Activities Associated with

WEST DEERBROOK DRIVE ROADWAY RECONSTRUCTION

City of Peoria, Peoria County, IL 61615

NPDES PERMIT NO: ILR40

Prepared For:

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Estimated Project Dates:

Project Start Date: 08/ 01/ 2024

Project Completion Date: 09/ 01/ 2025

Contents

INTRODUCTION 1

SWPPP Availability 1

Plan Updates 1

Retention of Records 1

Notice of Permit Termination 1

SECTION 1. SITE EVALUATION, ASSESSMENT, AND PLANNING..... 2

1.1. Project/Site Information..... 2

1.2. Contact Information/ Responsible Parties 2

1.3. Nature and Sequence of Construction Activity 3

1.4. Soils, Slopes, Vegetation, and Current Drainage Patterns 3

1.5. Construction Site Estimates..... 4

1.6. Receiving Waters 5

1.7. Sensitive Areas to be Protected 5

EcoCAT Review..... 5

1.8. Potential Sources of Pollution 5

1.9. Endangered Species Certification 6

1.10. Historic Preservation 6

1.11. Maps 6

SECTION 2. EROSION AND SEDIMENT CONTROL BMP..... 7

2.1. Minimize Disturbed Area and Protect Natural Features and Soil 7

2.2. Phase Construction Activity..... 7

Phase I..... 7

Phase II..... 7

Phase III..... 8

2.3. Control Stormwater Flowing onto and through the Project 8

2.4. Stabilize Soils 9

2.5. Protect Slopes..... 11

2.6. Protect Storm Drain Inlets..... 12

2.7. Establish Perimeter Controls and Sediment Barriers 12

2.8. Retain Sediment On-Site 13

2.9. Establish Stabilized Construction Exits 14

2.10. Dewatering Operations 15

SECTION 3. GOOD HOUSEKEEPING BMPS 16

3.1. Waste Management and Materials Handling..... 16

3.2. Establish Proper Construction Material Staging Areas..... 18

3.3. Designated Washout Areas 19

3.4. Establish Proper Equipment/Vehicle Fueling and Maintenance Practices..... 19

3.5. Spill Prevention and Control Plan 20

3.6. Allowable Non-Stormwater Discharge Management 20

SECTION 4. POST-CONSTRUCTION BMPs 22

4.1. Porous Concrete Pavement and Asphalt 22

4.2. Outfall Protection 22

SECTION 5. INSPECTIONS..... 23

5.1. Inspections..... 23

5.2. Delegation of Authority 24

5.3. Corrective Action Log..... 24

SECTION 6. RECORDKEEPING AND TRAINING 24

6.1. Recordkeeping 24

6.2. Log of Changes to the SWPPP..... 24

6.3. Training 24

6.4. Subcontractor Certification 24

SECTION 7: CERTIFICATION AND NOTIFICATION 25

SWPPP APPENDICES 26

- Appendix A – General Location Map
- Appendix B – Site Maps
- Appendix C – Construction General Permit
- Appendix D – NOI and Acknowledgement Letter from EPA/State
- Appendix E – Inspection Reports
- Appendix F – Corrective Action Log
- Appendix G – SWPPP Amendment Log
- Appendix H – Subcontractor Certifications/Agreements
- Appendix I – Grading and Stabilization Activities Log
- Appendix J – Training Log
- Appendix K – Delegation of Authority
- Appendix L – Additional Information
 - SHPO Review Letter and Submission Materials*
 - IDNR Review Letter and Submission Materials*
 - NRCS Web Soil Survey*

INTRODUCTION

This Stormwater Pollution Prevention Plan (SWPPP) (Plan) has been prepared to fulfill the requirements of the National Pollution Discharge Elimination System (NPDES) General Permit No. ILR10. In addition to the SWPPP, coverage under ILR10 requires the preparation of a detailed Erosion and Sediment Control Plan (ESCP) as well as the installation of active control measures and the utilization of inspection and maintenance program during construction, and preparation of related administrative documents. The goal of this SWPPP is to minimize the discharge of pollutants into the Water of the United States. To achieve this stated goal, structural and non-structural Best Management Practices (BMPs), as detailed in this Plan are to be used to reduce erosion, thereby minimizing the potential contamination of on-site stormwater and receiving waters with sediment and pollutants.

The stormwater discharge associated with construction activities for this project are permitted if complied with the General Permit. To receive authorization under ILR10, the stormwater discharge must either be covered under Illinois General NPDES Construction Site Permit or Notice of Intent (NOI) filed for coverage. The NOI must be submitted at least 30 days before the start of construction. Failure to file the NOI or discharge of stormwater related to construction activities without a permit constitutes a violation of the Environmental Protection Act and Clean Water Act and is thereby open to administrative and legal censure.

SWPPP Availability

This Plan and the Construction Documents Plans shall be jointly maintained as an integral part of the Permit for this project. A copy of the Plan shall be kept at the construction site from initiation of construction to the date of final stabilization or until the permit is terminated. The SWPPP is to be made available to the public if requested; however, the Owner may claim confidentiality for any part of the Plan per Title 40, Chapter 1, Subchapter A, Part 2.

Plan Updates

This Plan is required to be updated upon changes to the proposed design, construction operations or changes to the BMPs that have potentially significant effects to the discharge of pollutants to stormwater generated from the site. The Plan is to be similarly updated if there are new contractor(s) or subcontractor(s) that will implement any part of the Plan. Updates to the Plan may be reviewed by IEPA.

Retention of Records

The Owner shall retain copies of the Plan and all reports, notices required by the General Permit and all records of background and supplemental information used to prepare the NOI for coverage under ILR10 for a period of at least 3 years after permit expiration or notice of permit termination. The time for record retention may be extended by the request of IEPA.

Notice of Permit Termination

The Owner shall submit a completed Notice of Termination (NOT) signed in accordance with Signatory requirements of ILR10 to IEPA when the site has been permanently stabilized. See the **Appendix L** for NOT form.

SECTION 1. SITE EVALUATION, ASSESSMENT, AND PLANNING

1.1. Project/Site Information

Project/Site Name: West Deerbrook Drive Roadway Reconstruction

Project Street/Location: West Deerbrook Drive

City: Peoria State: IL ZIP Code: 61615

County or Similar Subdivision: Peoria

Latitude/Longitude (Use **one** of three possible formats, and specify method)

Latitude:

Longitude:

3. 40.823402 ° N (decimal)

3. 89.608149 ° W (decimal)

Method for determining latitude/longitude:

USGS topographic map (specify scale: _____)

EPA Web site

GPS

Is the project located in Indian country?

Yes

No

If yes, name of Reservation, or if not part of a Reservation, indicate "not applicable." _____

Not applicable

Is this project considered a federal facility?

Yes

No

NPDES project or permit tracking number*: ILR40

**(This is the unique identifying number assigned to your project by your permitting authority after you have applied for coverage under the appropriate National Pollutant Discharge Elimination System (NPDES) construction general permit.)*

1.2. Contact Information/ Responsible Parties

Project Owner/Operator:

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1.3. Nature and Sequence of Construction Activity

The project consists of roadway and stormwater improvements on and near approximately 3,000 linear feet of roadway on West Deerbrook Drive from the intersection of Knoxville Avenue to the end of the roadway in a cul-de-sac to the west. Improvements consist of the installation of a curb and gutter system, porous concrete panel sidewalks, permeable asphalt roadway pavement with subsurface storage for stormwater volume and peak rate attenuation, and stabilization of three stormwater outfalls. All proposed and implemented stormwater improvements will be limited to the city right-of-way or new or existing stormwater/utility easements.

Construction is anticipated to occur in 3 phases. The first phase will start at the eastern limit of the project from the cul-de-sac to the right half width of N. Antler Place. Phase 2 will be from the left half width of N. Antler Place to the right half width of N. Oakwood Drive and Phase 3 will be from the left half width of N. Oakwood Drive to Knoxville Ave. All three phases will be split into two subphases, to build first on the northern portion of Deerbrook Drive and followed southern section. Temporary lane widening will be used to always ensure adequate vehicular access to side roads. The porous asphalt and porous concrete sidewalk will require extra attention to ensure the permeability is not compromised during any phase of construction.

Stormwater outfalls will be constructed prior or in tandem with the roadway work depending on project phasing. All private utility relocation if required is anticipated to be done prior to start of the roadway work.

What is the function of the construction activity?

- Residential Commercial Industrial Road Construction Linear Utility
- Other (please specify):

Estimated Project Start Date: 08 / 01 / 2024

Estimated Project Completion Date: 09 / 01 / 2025

1.4. Soils, Slopes, Vegetation, and Current Drainage Patterns

The soil types within the project extents include:

- **Keomah Silt Loam (17A):** 0 to 2 percent slopes. Consists of about 11.9% of the project’s limit of disturbance. It belongs to hydrologic soil group C/D. It is somewhat poorly drained and is highly erodible.
- **Rozetta Silt Loam (279B):** 2 to 5 percent slopes. Consists of about 88.1% of the project’s limit of disturbance. It belongs to hydrologic soil group B. It is well drained and highly erodible.



Figure 1- NRCS Soil Map of soils within the project area

Please refer to NRCS ‘Soil Map – Peoria County, Illinois (Deerbrook Soil survey) for an extensive report of the project soils.

All soils located within the project site are moderately to highly corrosive of steel. Steel piping, structures, and other materials will be avoided. Rozetta silt loam comprising most of the site is rated as moderate for erosion hazards and will require erosion and sediment control measures. To that end, structural and good housekeeping BMPs are proposed as described in Section 1.7.

Prior to conversion of the site the residential development, the flatter areas were used for agriculture while the steep slopes within ravines were left undeveloped as woodlands. There are no know contaminants associated with prior land use that would pose to be an issue at construction.

1.5. Construction Site Estimates

Since the project involves the reconstruction and replacement of standard HMA roadway with a porous surface roadway, the project will result in overall reduction of impervious cover. Site grading will generally be confined to the roadway and will result in a net cut for export. No dedicated borrow area will be necessary. Below is summary of the project area’s and pre-and post-impervious cover.

Total project area:	5.3 acres
Construction site area to be disturbed:	5.3 acres
Percentage impervious area before construction:	59%
Runoff coefficient before construction:	90
Percentage impervious area after construction:	22%
Runoff coefficient after construction	88

1.6. Receiving Waters

There are no impaired waters within the project area. Runoff from W. Deerbrook Drive and the serving storm drainage system (consisting of a series of piped culverts and drainage swales) discharge via pipes to six outfalls located within gullies that exist between private properties on the south side of the site. Drainage from the gullies ultimately flow to an unnamed tributary, which has no noted impairments. The unnamed tributary flows towards Upper Peoria Lake, located along the Illinois River, which is classified by the EPA as an impaired water. Currently there are restoration efforts in place for the Illinois River with a restoration plan in place since 1983. The river is subject to TMDLs and is impaired for: Algal Growth, Chloride, Dissolved Oxygen, Fecal Coliform, Manganese, Nitrogen, Total, Nutrients, Pathogens, pH, Phosphorus, Phosphorus, Total, Sedimentation/siltation, Suspended Solids, Total Dissolved Solids (TDS), and Total Suspended Solids(TSS).

1.7. Sensitive Areas to be Protected

W. Deerbrook Drive and adjoining development sit atop a ridgeline running east to west that falls away sharply on the southern side to a steep, wood-covered ravine. The onsite soils are loessal in origins, silty in texture and highly erodible (see Section 1.4). During construction these erodible soils and other naturally occurring site features including steep slopes, receiving water bodies and vegetation will be protected by a combination of design strategies to minimize site disturbance, erosion and sediment pollution control BMPs, and good housekeeping BMPs. Perimeter protection (rolled erosion control products and silt fence) will be used on all downslope areas to prevent sediment laden water from leaving the construction site with particular attention paid to the steep slopes near the stormwater outfalls. Pumped filter bags and by-pass pumping will be used where flows and water quality are required to be maintained to the receiving waters.

At the high energy outfall locations, gabion stilling basins, reno mats and rip-rap energy dissipaters are proposed to reduce the velocity and erosive potential of concentrated flow leaving the outfall pipes. Immediately downslope from the primary energy dissipating structures, vegetated concrete blocks are also proposed to provide additional slope protection. Disturbed slopes upstream and adjacent the outfalls will be stabilized with various types of geofabrics used in conjunction with revegetation with native species.

Within each of the 3 construction phases, construction will occur in two general subphases beginning with the south side followed by the north side. Commencing construction on the topographically lower south side is intended to head off the primary source of sediment generation.

EcoCAT Review

The administrative review by the Illinois Department of Natural Resources (IDNR) concluded that the project will not pose any adverse impacts to protected resources initially identified through the Illinois Ecological Compliance Assessment (EcoCAT) screening (reference #2317316). Although the project is in the vicinity of several Illinois Natural Inventory Sites (INAI) and a protected species per EcoCAT screening, the response letter received on June 26, 2023, stated that due to the lack of potential negative impacts, consultation under 17 Ill. Adm. Code Part 1075 was terminated. The EcoCAT screening and the review letter are enclosed in **Appendix L**.

1.8. Potential Sources of Pollution

Potential sources of pollutants primarily can be grouped into earthwork activities that produce soil materials, operational and construction activities that produce trash, chemical and other organic and inorganic waste.

Potential sources of soil sediment to stormwater runoff include:

- Site preparation activities such as clearing, rubbing, and vehicle tracking;
- Earthwork activities including grading and site excavation operations, topsoil stripping and stockpiling, and
- Landscaping operations.

Potential sources of pollutants other than soil materials include:

- Construction equipment and vehicle operations and maintenance materials such as fuel, solvents and oils;
- Sanitary facilities;
- Construction materials such as solvents, adhesives, paving materials, trash, aggregates, fill materials, and
- Construction activity such as the installation of porous paving, stormwater piping and structures and concrete pouring.

1.9. Endangered Species Certification

The project does not pose any adverse impact to any endangered or threatened species or critical habitats on or near the project area. This determination was made through an initial screening submitted through EcoCAT (IDNR Project #: 2317316). Follow up review by IDNR staff did not identify potential adverse impact to any species that need any additional protection. Please refer to the review letter referenced in Section 1.7 of this Plan and enclosed in **Appendix L**.

1.10. Historic Preservation

As with the endangered species review, the project will have minimal impact to Illinois' or the community's architectural, cultural, or protected community resources. Screening using The Historic and Architectural Resources Geographic Information System (HARGIS) with 1 mile buffer of the project site did not find any record of protected architectural, cultural, or protected community resource.

A State Historic and Preservation Office (SHPO) review was submitted on initially submitted on 06/29/2023 and a follow-up submission was made on 01/10/2024. Per the review letter dated 01/31/2024 and SHPO log reference # 057010324, there are no "significant historic, architectural, or archeological resources are located within the project area". The clearance will remain in effect for two (2) years from the date of issuance. The SHPO review letter is enclosed in **Appendix L**.

1.11. Maps

Please see **Appendices A** and **B** for project maps.

SECTION 2. EROSION AND SEDIMENT CONTROL BMP

In addition to the BMPs described herein, the state's procedures and standards for urban soil erosion and sediment control that are applicable to protect surface waters are incorporated by reference even if not explicitly presented in this Plan and are enforceable under the NOI for discharge under ILR10. Additional BMPs required beyond those presented herein shall meet the requirements of the IEPA's Illinois Urban Manual (most current version).

2.1. Minimize Disturbed Area and Protect Natural Features and Soil

The limit of disturbance (LOD) can be observed on the Project Site Map. Construction will remain within this 5.3 acres designated limit of disturbance. Areas outside the LOD that may potentially be affected by construction activities will be protected through site protection (orange safety fence) and erosion and sedimentation control measures. Immediate offsite natural features that may be affected include vegetation consisting of mature trees located in private properties and the ravine, and downslope hydrologic resources. To protect on-site and nearby trees, protective fencing and root protection measures like boards and woodchip covers shall be used. To protect on site soil resources, stripped topsoil from the construction area will be removed off site and the use of temporary stockpiling will be limited. Where temporary stockpiling is necessary, stabilization measures shall be applied to the graded stockpile. The slopes of the stockpile will not exceed 2:1 slope to prevent any potential erosion. Stripped topsoil shall be covered and rolled erosion control product and/or silt fences shall be installed along the perimeter of the stockpile. The stockpiled area shall be inspected weekly for erosion and immediately after storm event. Areas around the stockpile that have been eroded will be stabilized immediately with erosion controls.

2.2. Phase Construction Activity

Construction is proposed to occur in three major phases as described below.

Phase I

Within Phase 1, drainage improvements to outfall F shall be installed prior to work on the roadway. Phase 1 shall have 4 stages in which lane widening will be accompanied by half width construction to complete successive strips of the roadway segment. In Phase 1/Stage 1, temporary pavement is to be installed to widen the roadway. In Phase 1/Stage 2, the south side of the roadway will be configured for 2 lane bi-directional access with temporary and porous pavement installed on the north side of the roadway. In Phase 1/ Stage 3, construction is to be completed on the south side of the of the roadway accompanied by installation of temporary pavement with the north side of the roadway used for 2 lane bi-directional traffic. Lastly, during Phase 1/ Stage 2, sidewalks and gutter on the north side of the street are installed with temporary lane narrowing.

Phase II

Phase 2 shall involve half width roadway construction with one way travel, using detour through W. Brookforest to N. Antler for access. In Stage 1 of Phase 2, construction, including the installation of pavement, gutter and sidewalk is to be completed first on the south side of the roadway. The north side is to be kept open for 1-way travel. When construction is completed on the south side, direction of one-way travel is to be reversed in Stage 2/Phase2 with one-way travel on the south side of the street with construction occurring on the north side of the street.

Phase III

Like Phase 2, Phase 3 shall utilize 1-way travel, half width construction facilitated with detour to through W. Brookforest Drive and N. Wilderness Drive. In Stage 1 of Phase 3, construction, including the installation of pavement, gutter and sidewalk is to be completed first on the south side of the roadway with the north side kept open to one lane travel. When construction is completed on the south side, direction of one-way travel is to be reversed in Phase2/Stage 2 with one-way travel on the south side of the street with construction occurring on the north side of the street.

2.3. Control Stormwater Flowing onto and through the Project

Site Grading

BMP Description:

The grades within the roadway are mild (less the 2.5 percent). During roadway construction the exposed roadbed will become the lowest area for localized drainage and will essentially function as a containment area for runoff. Collected runoff is to be managed through percolation or evaporation. If these passive measures are inadequate, contractor may install shallow sumps to provide greater relief. In general, the contractor is to provide dry working condition for construction on the roadbed, including modification of the subgrade to achieve greater percolation.

Grading tie-ins occurring at the periphery of the project areas in private properties are generally higher than the roadway. Grading will initially divert stormwater to the existing swales drainage system before the swales are decommissioned as new stormwater control structures are constructed as replacements. Temporary check dams may be used to control the flow and volume of stormwater within the swales. Erosion control devices such as silt fences and rolled erosion control products will be used to manage runoff that may be generated on these upslope disturbed areas.

Grading at the outfalls will proceed upstream to downstream and will be conducted to preserve or minimally disturb adjacent vegetation, soils and drainage patterns. Slopes will be maximally graded at 2:1 and they shall be immediately stabilized with geotextiles used in combination with seeding.

<i>Installation Schedule:</i>	Installation of perimeter erosion protection measures will commence prior to the start of any site grading activities.
<i>Maintenance and Inspection:</i>	Silt socks and fences will be maintained and inspected as described in other sections of this document. The project area will be inspected weekly and after storm events for ponding, flooding, or failures to stormwater management BMPs. Existing swales and inlets will also be inspected weekly and after a storm event. Installed temporary and permanent stabilization measures will be inspected after storm events and at minimum weekly for effectiveness. Defective BMPs shall be corrected within 24 hours.
<i>Responsible Entity:</i>	Contractor

2.4. Stabilize Soils

Stabilization practices may include but are not limited to temporary seeding, permanent seeding, mulching, geotextiles, sodding, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. Stabilization measures shall be initiated immediately where construction activities have temporarily or permanently ceased, but in no case more than one (1) day after the construction activity in that portion of the site has temporarily or permanently ceases on all disturbed portions of the site where construction will not occur for a period of fourteen (14) or more calendar days except in the case of snow cover and planned resumption of construction activities as noted below.

Temporary Erosion Control Seeding

BMP Description:

Quick growing temporary seeding, mulching and stabilization erosion control fabrics will be used to stabilize exposed soils where there is potential for erosion and runoff.

Temporary seeding and stabilization may be used on areas where construction activity has temporarily ceased and will resume after fourteen (14) days.

<input type="checkbox"/> Permanent <input checked="" type="checkbox"/> Temporary	
Installation Schedule:	Temporary erosion control seeding shall be oats form March 1 to July 31 and winter wheat from August 1 to November 15.
Maintenance and Inspection:	Seeded areas will be inspected weekly and after storm events to determine if soils have been moved by flowing water, seeding failure or signs of erosion. If washout, tears in the erosion control fabric, seeding mortality or erosion occurs, the surface will be repaired, and new seeding will be applied to damaged areas.
Responsible Entity:	Contractor

Permanent Seeding and Sodding

BMP Description:

Permanent seeding and stabilization shall be initiated immediately where construction activities have permanently ceased, but in no case more than one (1) day after the construction activity in that portion of the site has permanently ceased.

Where the initiation of stabilization measures is precluded by snow cover, stabilization measures shall be initiated as soon as practicable.

Native species endemic to the region will be used to establish vegetative cover on exposed soils in natural areas. Sodding with salt tolerant, cool season grasses is proposed for locations where immediate vegetative cover is required in the ROW.

<input checked="" type="checkbox"/> Permanent <input type="checkbox"/> Temporary	
Installation Schedule:	Portions of the site where construction activities have permanently ceased will be stabilized, in no case more than one (1) day after the construction activity in that portion of the site has permanently ceased.
Maintenance and Inspection:	All seeded areas will be inspected weekly during construction activities after storm events for failure until a dense cover of vegetation has been established. If failure is noticed, areas will be reseeded and mulched. The roadway buffer strip will resodded,

	fertilized, and watered as required. After construction is complete, permanently stabilized areas will be monitored until final stabilization is reached with 75% cover of installed vegetation.
<i>Responsible Entity:</i>	Contractor

2.5. Protect Slopes

Geotextile Erosion Control Blanket

BMP Description: In areas where earth disturbance is anticipated to occur on existing steep slopes, proposed slopes with greater than 3:1 grade or on erosion prone soils, geotextile erosion control blanket will be used in combination with permanent seeding to provide stabilization. The erosion control fabric will provide immediate stabilization even when seasonal and weather conditions are not favorable for seed germination. The erosion blanket will be installed by anchoring within a trench and stapling the leading edge of the blanket in the trench. The blanket will be installed to have good contact with the underlying soils. If the blanket cannot cover the entire slope, the blankets will be overlapped to provide a continuous cover and stapled at the overlapped edge. Where proposed slopes are greater than 2:1, soil filled geoweb in combination with seeding is proposed to provide a more robust system of stabilization. The erosion control blanket and geoweb systems will be installed according to the manufacturer's instructions and specifications.

Installation Schedule:	Erosion control blanket and geoweb stabilization systems will be installed when final grades have been achieved.
Maintenance and Inspection:	The erosion control blanket and geoweb systems will be inspected weekly and immediately after storm events to determine if defects, tears, or breaches have formed in the fabric. If defects are observed, the blanket will be repaired or replaced immediately. Good contact with the soil must be maintained and erosion should not occur under the blanket. Any areas where the blanket is not in close contact with the ground will be repaired.
Responsible Entity:	Contractor

Perimeter Erosion Barrier

BMP Description: Perimeter erosion barrier such as silt fence and rolled erosion products will be installed according to IDOT's Bureau of the Environment, section 280 of IDOT Road and Bridge Construction Manual and the manufacturer's instructions and specifications. They will be installed along the perimeter of the disturbed soil area, downslope of erodible soil areas, below the toe of exposed or erodible slopes and around temporary topsoil stockpiles. Rolled erosion control products will be installed on a level ground with the ends turned upslope. Silt fences will be installed parallel to contour lines to intercept drainage areas less than a quarter of an acre located upslope of the fence line.

Installation Schedule:	Silt fence and rolled erosion control products will be installed before the start of earthwork activities.
Maintenance and Inspection:	Fences will be inspected weekly and after storm events to ensure that they are intact and in place. Inspection and maintenance will ensure that there are no gaps at the bottom of the fence for stormwater bypass or stormwater has not overtopped or breached the silt fence. Signs of excessive sediment deposit and concentrated flows which may cause fence failure will also be observed. If any part of the fence is compromised, it shall be replaced. Accumulated sediment will be removed from the fence base if it reaches one third of the height of the fence. If the sediment cannot be removed, a

	secondary silt fence shall be installed parallel to the first one. The silt fence will be kept in place until the site is stabilized.
Responsible Entity:	Contractor

2.6. Protect Storm Drain Inlets

Inlet Protection

BMP Description: Drop inlet filter bags consistent with Article 1081.15 (h) of IDOT Specifications and/ or Illinois Urban Manual (IUM) of Practice Standard Detail – 561D are to be used for existing and proposed stormwater structures to trap sediment from incoming stormwater. Above grade filter bags are proposed for curb opening inlets and shall be consistent with IUM -561C. Inlet protection shall be consistent with BDE Manul Chapter 41, Section 3.02.	
Installation Schedule:	Drop inlet filter bags will be installed within existing inlets along W. Deerbrook Drive before construction begins and will be kept in place until the inlets are brought offline or removed. Drop inlet filter bags or standard curb opening inlet filters will be used commensurate with the types of inlets proposed. The inlet protection devices will be kept in place until potential sources of sedimentation are stabilized.
Maintenance and Inspection:	The drop and standard filter bags will be inspected weekly and immediately after storm events. If the drop filter bags become clogged or filled with sediment, the bag will be removed, cleaned, and replaced. Accumulated sediment trapped by at-grade inlet filters will be removed and the filter will be reset as necessary.
Responsible Entity:	Contractor

2.7. Establish Perimeter Controls and Sediment Barriers

Silt Fence

BMP Description: Silt fence shall be installed per code 920 of the IUM Manual of Practice Standard or as specified by manufacturer’s instructions whichever is the more stringent. Silt fences will be installed along the perimeter of the disturbed project area, downslope of erodible soil areas, below the toe of exposed and erodible slopes and around temporary topsoil stockpiles. Silt fences will be installed by excavating a 12-inch-deep trench along the line of proposed installation. Wooden posts supporting the silt fence will be spaced 4 to 6 feet apart and driven securely into the ground; a minimum of 18 to 20 inches deep. The silt fence will be fastened securely to the wooden posts with wire ties spaced every 24 inches at the top, mid-section, and bottom of the wooden post. The bottom edge of the silt fence will extend across the bottom of the trench and will be securely buried in compacted backfill to prevent stormwater and sediment from discharging underneath the fence.	
Installation Schedule:	The silt fences will be installed before the start of grading and earthwork activities.
Maintenance and Inspection:	Silt fences will be inspected weekly and immediately after storm events to make sure that they are intact, have no gaps where they meet the ground or have no tears along the length of the fence. If gaps or tears are found during the inspection, the fabric will be repaired or replaced immediately. Accumulated sediment will be removed from the base of the fence if the sediment reaches one-

	third the height of the silt fence. If any accumulation of sediment creating strains on the fabric which could rupture the fence during storm events is observed, the sediment will be removed more frequently. Before the fence is removed from the project area at the end of construction activities, the any accumulated sediment will be removed and disposed at an approved location.
Responsible Entity:	Contractor

Rolled Erosion Control Products

BMP Description: Rolled erosion control products (rolled excelsior) will be used to control runoff from small, disturbed areas when it is in the form of sheet flow and the discharge is to a stable area. The rolled product shall be consistent with IDOT Specifications Article 1081.15 (f) and/or per code 912 of the IUM Manual of Practice Standard and shall be composed of fiber filling encased within a durable netting. The rolled product will be installed on level ground or at the same elevation when used on sloped areas.

Installation Schedule:	Rolled erosion control product (RECP) shall be installed prior to earthwork activities.
Maintenance and Inspection:	The RECP will be inspected weekly and after storm events for movement or damage. If damaged with tears or rips, it will be replaced immediately. Sediment accumulation will be removed so that no sediment exceeds the height of the RECP.
Responsible Entity:	Contractor

2.8. Retain Sediment On-Site

Silt Fence, Rolled Erosion Control Products and Inlet Protection

BMP Description: Per Section 2.6, inlet protection devices (dropped filter bags or surface inlet protection) will prevent sediment from entering existing and proposed storm sewers. Per Section 2.7, silt fences and RECP will be used to trap sediment from mobilization into stormwater and surface runoff during the performance of grading and earthwork activities. Rock construction entrances as detailed in Section 2.9 will also trap soil from leaving the site on the tires and chassis of construction vehicles.

Installation Schedule:	The protective devices as described above will be installed before commencing earthwork and grading activities. RECP will be placed around temporary soil stockpiles immediately upon creation of the stockpile. Inlet protection devices will be deployed as needed during roadway construction before start of grading and earthwork activities. They will be kept in place until sources of sediment production are stabilized.
Maintenance and Inspection:	Refer to Sections 2.6 and 2.7. Accumulated sediment will be collected, removed, and disposed of at an approved location that meets required state and local regulations.
Responsible Entity:	Contractor

2.9. Establish Stabilized Construction Exits

Rock Construction Entrance/Exit

BMP Description: A rock construction entrance/exit per IUM Code 930 is proposed wherever construction traffic is anticipated to exit the project site onto any public or private roadway and the potential for sediment translocation exists. In addition to coarse aggregate bedding that will abrade soil materials from the tires, a geotextile underlayment will be placed over the existing ground prior to placing the stone. Rock construction entrances will be maintained to the specified dimensions and replacement aggregate will be added to keep the capacity for soil removal as necessary.

Installation Schedule:	The installation RCEs will be coordinated with staging of various phases of the project. They will be kept in place until all work in the applicable phase has been stabilized or construction activities cease, at which point the RCE will be removed. The decommissioned area then shall be restored.
Maintenance and Inspection:	Construction entrance(s) will be inspected weekly and after storm events to ensure functionality and integrity. Inspection shall confirm that the geotextile is still in place and that the placed stone continues to perform the intended function at the entrance.
Responsible Entity:	Contractor

Tire Washout

BMP Description: Wash stations reduce or eliminate sediment tracking onto public rights-of-way or streets. A designated area to wash off soil materials that cannot be removed by RCEs from construction vehicles before leaving the site will be provided if required.

Installation Schedule:	Wash station shall be installed as needed depending on the performance of RCE.
Maintenance and Inspection:	Sediment laden water will be directed away from the construction entrance to a sediment trapping facility such as an enclosed area created from rolled E&S products. Accumulated sediment shall be removed and disposed at an approved location.
Responsible Entity:	Contractor

2.10. Dewatering Operations

Pumped Sediment Filter Bags

BMP Description: Dewatering/ pumping operations per IUM Code 813 are to be used to manage high storm water flows which may have large quantities of suspended sediments or pollutants. During dewatering and pumping operations, only uncontaminated water shall be allowed to be discharged to natural drainage ways or to the storm sewer system. Water from pumping operation shall discharge to a stabilized area that may either be an energy dissipater and/or sediment filter bag. Intake hoses should be positioned to minimize uptake of sediment from the water source. Receiving channel or outfall shall be protected from erosion and be arranged to direct water to the desired location.

Installation Schedule:	Dewatering operations shall be used as needed.
Maintenance and Inspection:	Accumulated sediment deposited in the energy dissipater or sediment bag shall be removed and disposed in an approved manner according to applicable municipal, state and federal regulations.
Responsible Entity:	Contractor

SECTION 3. GOOD HOUSEKEEPING BMPS

Good housekeeping BMPs as preventative measures shall be required for the performance of the work. Construction contractor shall provide QA/QC plan for good housekeeping BMPs. The QA/QC plan shall address handling of waste and materials to be recycled, site contamination containment procedures, materials storage and delivery procedures, health and safety procedures, and vehicle and equipment operations.

3.1. Waste Management and Materials Handling

Waste Materials

BMP Description: Waste shall be collected and stored for disposal. Construction waste materials shall be collected and disposed of into dedicated waste disposal containers such as metal dumpsters to be placed at the material storage/staging area. The disposal containers shall have secure, watertight lids; be placed away from stormwater conveyances and drains; and meet all federal, state, and municipal regulations for transport, handling, or storage. Only trash and construction debris from the site shall be deposited in the disposal containers. No construction materials shall be buried or disposed of on-site. Contractor personnel is be instructed regarding the correct disposal of trash and other construction debris. Notices stating proper handling and disposal practices are be posted at a visible location for reference and the contractor's onsite operational staff shall ensure compliance of their crews.

Installation Schedule:	Storage areas and facilities will be established at project kickoff. Disposal containers will be installed upon the designation the of materials storage and staging area prior to start of construction activities.
Maintenance and Inspection:	The disposal containers shall be inspected weekly and after storm events. They will be emptied per the defined schedule, minimum weekly or when full.
Responsible Entity:	Contractor

Hazardous Waste Materials

BMP Description: No hazardous waste materials are anticipated to be generated from on-site materials on this project. There are no buried fuel or other underground storage facilities on-site. Contractor shall be encouraged to minimize activities such as vehicle maintenance, fueling and repairs on site as these activities may release potentially hazardous materials. Construction waste materials that may become hazardous through accidental discharge, spills, or improper handling such as oil filters, petroleum products, paint, and equipment maintenance fluids shall be stored in their original or clearly marked containers and be kept at secured areas separate from regular waste products. Protocols shall be established for safe handling of these materials. Secondary containment devices such as spill pallets will be provided as warranted. Additionally, all hazardous waste materials shall be disposed of in accordance with federal, state, and municipal regulations. Hazardous waste materials shall not be disposed of in containers intended for regular waste materials. Contractor personnel shall be instructed about proper procedures for hazardous waste disposal. Procedural notices shall be posted on site and the contractor's onsite operational staff shall ensure compliance.

Installation Schedule:	Containers and confinement areas for potentially hazardous waste material will be established upon the designation of materials storage and staging area prior to the start of construction activities.
Maintenance and Inspection:	Storage areas for potentially hazardous materials will be inspected weekly and after storm events. The storage areas will be kept clean, well-organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. Material safety data sheets, material inventory, and emergency contact numbers shall be maintained on site at a clearly visible location. Contractor personnel will be tasked with coordination and be responsible for proper handling of materials by its crews.
Responsible Entity:	Contractor

Sanitary Waste

BMP Description: Temporary sanitary facilities such as portable toilets or bathrooms shall be provided at the site throughout the construction period. The sanitary facilities shall be located away from concentrated flow paths and traffic flows. Secondary containment features shall be indicated for any free-standing sanitary facility.

Installation Schedule:	Portable sanitary facilities shall be provided at the start of construction and be kept on site during the construction period.
Maintenance and Inspection:	Waste from portable sanitary facilities shall be removed multiple times a week to maintain the facilities in a clean, hygienic and safe condition. Facilities will be inspected weekly for evidence of leaking holding tanks. Toilets with leaking holding tanks will be removed from the site and replaced with new portable toilets.
Responsible Entity:	Contractor

Recycling

BMP Description: Typical construction waste such as wood pallets, cardboard boxes, and other recyclable construction scraps will be disposed of in a designated waste disposal container for recycling. These containers shall have a secure watertight lid, be placed away from stormwater conveyances and drains, and meet all local and state solid-waste management regulations. Only solid recyclable construction waste shall be deposited in the containers. Contractor personnel shall be instructed regarding proper procedures for recycling waste disposal. Procedural notices shall be posted on site at a clearly visible location. The contractor's onsite operational staff shall ensure compliance.

Installation Schedule:	Designated recycling containers will be installed once the staging or material storage area has been designated.
Maintenance and Inspection:	The recycling container shall be inspected frequently and immediately after storm events. The recycling container will be emptied weekly and taken to an approved recycling center. If recyclable construction wastes are exceeding the dumpster's capacity, the container will be emptied more frequently.
Responsible Entity:	Contractor

3.2. Establish Proper Construction Material Staging Areas

Materials Storage Area

BMP Description: The general staging area may be composed of a construction equipment and maintenance materials staging area and a materials storage area. The staging area will be kept secured and appropriate perimeter and interior containment shall be installed to prevent release of pollutants into the site's water resources. A watertight container shall be used to store tools, small parts, and other construction materials. Bulk construction materials such as pipes, prefabricated storm structures and fittings, gabions, etc. and construction scrap material (wood, steel, metal scraps, and pipe cuttings, etc.) will be stored at a secured storage area or container. All potentially hazardous-waste materials such as filters, petroleum products, paint, and equipment maintenance fluids will be stored in structurally sound and sealed containers under cover within the designated materials storage area.

Installation Schedule:	The materials storage and staging area will be established after project kickoff at the site.
Maintenance and Inspection:	The storage area will be inspected weekly after storm events. The storage area will be kept clean, organized, and equipped with cleanup supplies. Perimeter controls, containment structures, covers, and liners will be repaired or replaced as needed to maintain proper function.
Responsible Entity:	Contractor

3.3. Designated Washout Areas

Concrete Washout Facility

BMP Description: Where concrete will be poured or otherwise formed on site, suitable washout facilities shall be provided for cleaning of chutes, mixers, and hoppers of the delivery vehicles consistent with IUM Practice Standards. Wholesale cleaning of mixing drums on site shall be prohibited. At a minimum, the concrete washout facilities shall adhere to the following:

- The facilities shall be located on a flat surface and be situated minimum 50 feet away from storm drains, open ditches, or surface waters.
- They should be placed securely to prevent accidental damage or spills caused by other equipment or vehicles.
- The washout facilities shall be sufficiently sized, fabricated or be provided in sufficient numbers for the intended operations. Additional protective measures are to be installed around washout facilities if elevated potential for spills exist.
- Washout water is appropriately managed so that it is not introduced to the environment.
- Solid concrete waste is disposed according to according to Illinois EPA (415 ILCS 5).
- Vehicle tracking is provided as required for concrete pours on un-paved areas.

Installation Schedule:	Facilities will be installed when concrete installation will be necessary.
Maintenance and Inspection:	The washout facilities and adjacent area will be inspected daily to ensure that all concrete washing is being discharged into the washout facilities, no leaks or tears are present, and to identify when concrete wastes need to be removed. Any washout facility will be cleaned out once it is filled to 75 percent of the holding capacity or the minimum freeboard for concrete water is reached, whichever presents the lesser potential for spillage. Once the facility’s holding capacity is reached, the concrete slurry and hardened concrete will be removed and disposed of in accordance with applicable regulations and the facility restored to a functional state. Damaged facilities will be immediately repaired or replaced as appropriate.
Responsible Entity:	Contractor

3.4. Establish Proper Equipment/Vehicle Fueling and Maintenance Practices

Vehicle Maintenance

BMP Description: A dedicated area shall be provided for storing, staging and maintenance of construction equipment and vehicles. No major repair or fueling of construction vehicles shall be permitted on site.

Installation Schedule:	The maintenance area shall be established before the start of construction activities.
Maintenance and Inspection:	Construction equipment/vehicles shall be inspected frequently to identify any leaks, which shall be repaired immediately, or the vehicle/ equipment shall be removed from site. If minor repaired are required, they shall be conducted at an approved staging or storage area to prevent release of mechanical fluids, oils or solvents into runoff. The

	<p>staging area shall be equipped with spill response equipment for containment of any leaks.</p> <p>Cleaning of vehicles shall only be done as necessary to facilitate minor repairs or maintenance; cleaning solvents or soaps shall not be used. Vehicle wash water shall be directed away from drainage-ways but instead be allowed to percolate or evaporate.</p>
Responsible Entity:	Contractor

3.5. Spill Prevention and Control Plan

Spill Prevention and Control

The Contractor is to provide Spill Prevention and Control Plan. The following minimum procedures shall be followed to minimize the risk of spills and accidental release of pollutants into receiving waters.

- Contractor personnel shall be educated about proper material handling, and spill control and containments. Responsible person(s) shall be assigned as Coordinator(s) for execution of the plan during spills and to ensure implementation of the plan.
- Vehicle maintenance and equipment shall be maintained off-site and will be regularly checked for leaking oil and fluids.
- Spill kits will be housed in the materials storage area and concrete washout facilities. Ease of access shall be provided for spill cleanup and emergency response.
- All spills shall be cleaned up immediately upon discovery. Materials used to clean the spills will be taken off-site to the appropriate waste management facility in compliance with municipal, state, and federal regulations.
- Spills large enough to discharge to surface water will be reported to the National Response Center at 1-800-424-8802.
- Manufacturer’s recommended methods for spill cleanup and containment shall be clearly posted.
- Material safety data sheets, a material inventory, and emergency contact information will be maintained on-site at an accessible, visible location under cover location.
- In the event of a spill, the Spill Prevention and Control Plan shall be reviewed and updated with additional information or modified with revised procedures as appropriate.

More information on vehicle drip waste can be found in Section 3.4.

3.6. Allowable Non-Stormwater Discharge Management

Below are allowable non-stormwater discharges and the measures that may be used with care to prevent major discharge in stormwater.

Water Used to Control Dust

BMP Description: Contractor is to provide control plan based on likely dust generating activities. Dust control shall be implemented as needed once site grading has begun and during windy conditions while site grading is occurring. Dust control may be implemented as spraying potable water at low rates from a mobile pressure-type distributor truck whenever the dryness of the soil warrants. Street sweeping will be used in connection with spraying to provide enhanced controls.

Responsible Entity:	Contractor
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Landscape Irrigation

BMP Description: Irrigation waters will not be sprayed onto impermeable surfaces such as paved driveways and roads. Waters will be directed onto soil and installed vegetation. To avoid discharges of irrigation waters, the watering devices will have low-flow rates and increased watering time. The irrigated area will be inspected for excess watering and to adjust watering times and schedules.

Responsible Entity:

Contractor

SECTION 4. POST-CONSTRUCTION BMPs

4.1. Porous Concrete Pavement and Asphalt

BMP Description: Porous concrete panel pavement and porous asphalt roadway will be installed at the project site as indicated on the project plans. Void spaces within the porous pavement and asphalt allow surface runoff to move through the paving material and infiltrate into the underlying soils. Porous concrete panel pavement and porous asphalt roadway will be utilized as a post construction stormwater management system or low impact BMPs throughout the project site.

Installation Schedule:	See project phasing. The porous asphalt roadway and walkways will be installed in 3 phases, which are further divided into sub-phases to maintain traffic flow and facilitate access to affected properties.
Maintenance and Inspection:	Immediately upon installation, the porous pavement and asphalt will be inspected for performance to meet infiltration requirements for each type of system. Once installed, they shall be inspected frequently according to specifications to meet design parameter. During construction, completed sections of both pavings will be inspected after wet weather events for contamination from sediment originating from nearby sources or on-going construction activities. Any structural damage found during the inspection will be repaired immediately. Post construction, the porous pavement and asphalt roadway will be maintained by regenerative air sweeping and deep cleaning to maintain infiltration capacity and stormwater management functions per guidelines according to the operations and maintenance program.
Responsible Entity:	Contractor during construction and through the warranty period; by the city post construction.

4.2. Outfall Protection

BMP Description: Outfall protection in the form of riprap mats, channel lining or gabion stilling basin with reno mat shall be used to reduce the velocity of stormwater discharge and trap sediments. These structures will be installed at three stormwater outfall locations as indicated on the plans as outfall D, E and F.

Installation Schedule:	The outfall protection structures will be installed in a phased manner to coincide with phase work for the roadway.
Maintenance and Inspection:	They will be inspected after major rain events during the 1st year and bi-annually thereafter. Maintenance may consist of removing accumulated sediments.
Responsible Entity:	Contractor during construction and warranty period and qualified personnel engaged by the city thereafter.

SECTION 5. INSPECTIONS

5.1. *Inspections*

5.1.1. *Inspection Personnel:*

The Engineer and the contractor's erosion and sediment control manager (ESCM) will be responsible for inspections of E&S measures. The inspectors shall prepare an inspection report which will be completed after each inspection to be signed by the Engineer and ESCM.

Qualified personnel shall inspect disturbed areas of the construction site including active, waste, and use areas, which have not yet been finally stabilized; structural control measures, and locations where vehicles and equipment enter and exit the site using the attached inspection form in **Appendix E** or as deemed equivalent by the Engineer. Such inspections shall be conducted at least once every seven (7) calendar days and within twenty-four (24) hours of the end of a storm or by the end of the following business or workday that is 0.5 inch or greater or equivalent snowfall.

Inspection frequency may be reduced to monthly when construction activities have ceased due to frozen conditions and erosive potential is minimized. Weekly inspections will recommence when construction activities are conducted, or if there is 0.5" or greater rain event, or a discharge due to snowmelt occurs.

5.1.2. *Inspection Reports:*

The inspection report shall summarize the scope of the inspection, inspection dates, personnel, observations, and corrective actions as warranted. The inspection reports are to be maintained on site as records of on-going BMP operations and maintenance and be further retained for a minimum period of three (3) years post construction. See the attached Inspection Report Form in **Appendix E** to be used on the project.

5.1.3. *Inspection Schedule and Procedures:*

Disturbed, staging and storage areas shall be inspected for signs of or potential for pollutants entering the stormwater system. Erosion and sediment control measures as presented on the plans. Each specific type of structural BMP shall be observed to ensure performance. Locations of stormwater discharge, if accessible, shall be monitored to ensure that they are stable. Installed stabilization measures shall equally be observed to ensure integrity and are operating as intended. Construction vehicle access areas shall be observed to ensure that sediment is not tracked offsite. Non-compliant measures shall be corrected within 24 hours by the contractor. Inspections shall occur minimum weekly during active construction period and monthly during cessation of construction activities due to winter shutdown or schedule. Refer to each BMP type for applicable inspections procedures and frequency.

5.1.4. *SWPPP Violations:*

For observed violation of the SWPPP during inspections, including those not explicitly identified by the Plan, and any illicit discharge existing the project area or to receiving waters, the Engineer shall immediately report non-compliance to ILEPA's Division of Water Pollution Control using the Construction Site Stormwater Discharge Incidence of Non-Compliance (ION). Corrective actions must be initiated to address any non-compliant issues. Corrective actions shall be conducted when a BMP needs repair, replacement or maintenance; a stormwater BMP

is required to be installed if not in place or is incorrectly installed to be rendered ineffective; or stormwater discharges are above permissible limits to negatively impact water quality standards; or the discharge is illegal.

5.2. Delegation of Authority

Entities or individual(s) or identified herein shall have delegated authority for the purposes of signing inspection reports, certifications, or other information.

See **Appendix K** for entities or individuals with Delegatory Authority.

5.3. Corrective Action Log

Contractor is to provide and keep a record of corrective actions for non-compliant BMPs.

See **Appendix F** for a Corrective Action Log.

SECTION 6. RECORDKEEPING AND TRAINING

6.1. Recordkeeping

Records will be retained for a minimum period of at least 3 years after the end of the permit coverage or termination of the permit.

Date(s) when major grading activities occur:

See Grading and Stabilization Activities Log in **Appendix I**.

Date(s) when construction activities temporarily or permanently cease on a portion of the site:

See Grading and Stabilization Activities Log in **Appendix I**.

Date(s) when an area is either temporarily or permanently stabilized:

See Grading and Stabilization Activities Log in **Appendix I**.

6.2. Log of Changes to the SWPPP

Changes to the SWPPP that represents substantial modification to the type, design or performance of any BMPs shall be recorded.

See **Appendix G** for Log of Changes to the SWPPP.

6.3. Training

The Engineer and Contractor shall be responsible for providing SWPPP training. See **Appendix J** for Training Log.

Training Conducted:

- General stormwater and BMP awareness training for staff and subcontractors:
- Detailed training for staff and subcontractors with specific stormwater responsibilities:

6.4. Subcontractor Certification

Any subcontractor engaged in portion of the work or thereof that has potential to impact stormwater shall comply with the requirements of the SWPPP Plan and shall enter in agreement.

See **Appendix H** for Subcontractor Certification/ Agreements

SECTION 7: CERTIFICATION AND NOTIFICATION

See attached NOI and Permit Authorization as provided in **Appendix D**.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: Kevin Flynn, P.E.

Title: Senior Vice President, ARKF, inc.

Signature:



Date: 02/13/2024

SWPPP APPENDICES

Attach the following documentation to the SWPPP:

- Appendix A – General Location Map*
- Appendix B – Site Maps*
- Appendix C – Construction General Permit*
- Appendix D – NOI and Acknowledgement Letter from EPA/State*
- Appendix E – Inspection Reports*
- Appendix F – Corrective Action Log*
- Appendix G – SWPPP Amendment Log*
- Appendix H – Subcontractor Certifications/Agreements*
- Appendix I – Grading and Stabilization Activities Log*
- Appendix J – Training Log*
- Appendix K – Delegation of Authority*
- Appendix L – Additional Documentation*
 - SHPO Review Letter and Submission Materials*
 - IDNR Review Letter and Submission Materials*
 - NRCS Web Soil Survey*

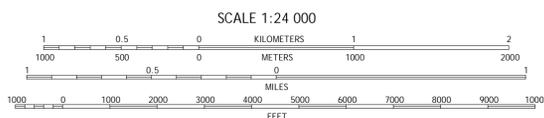
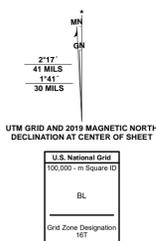
Appendix A
General Location Map



Project Location

Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84) Projection and
1 000-meter grid/Universal Transverse Mercator, Zone 18T
This map is not a legal document. Boundaries may be
generalized for this map scale. Private lands within government
reservations may not be shown. Obtain permission before
entering private lands.

Imagery: NAIP, August 2019 - August 2019
Roads: U.S. Census Bureau, 2017
Names: GNS, 1980 - 2020
Hydrography: National Hydrography Dataset, 2006 - 2018
Contours: National Elevation Dataset, 1999
Boundaries: Multiple sources - see metadata file, 2018 - 2019
Public Land Survey System: BLM, 2020
Wetlands: FWS National Wetlands Inventory Not Available



1	2	3
4	5	6
7	8	

ROAD CLASSIFICATION

Expressway	Local Connector
Secondary Hwy	Local Road
Ramp	4WD
Interstate Route	US Route
	State Route

SPRING BAY, IL
2021

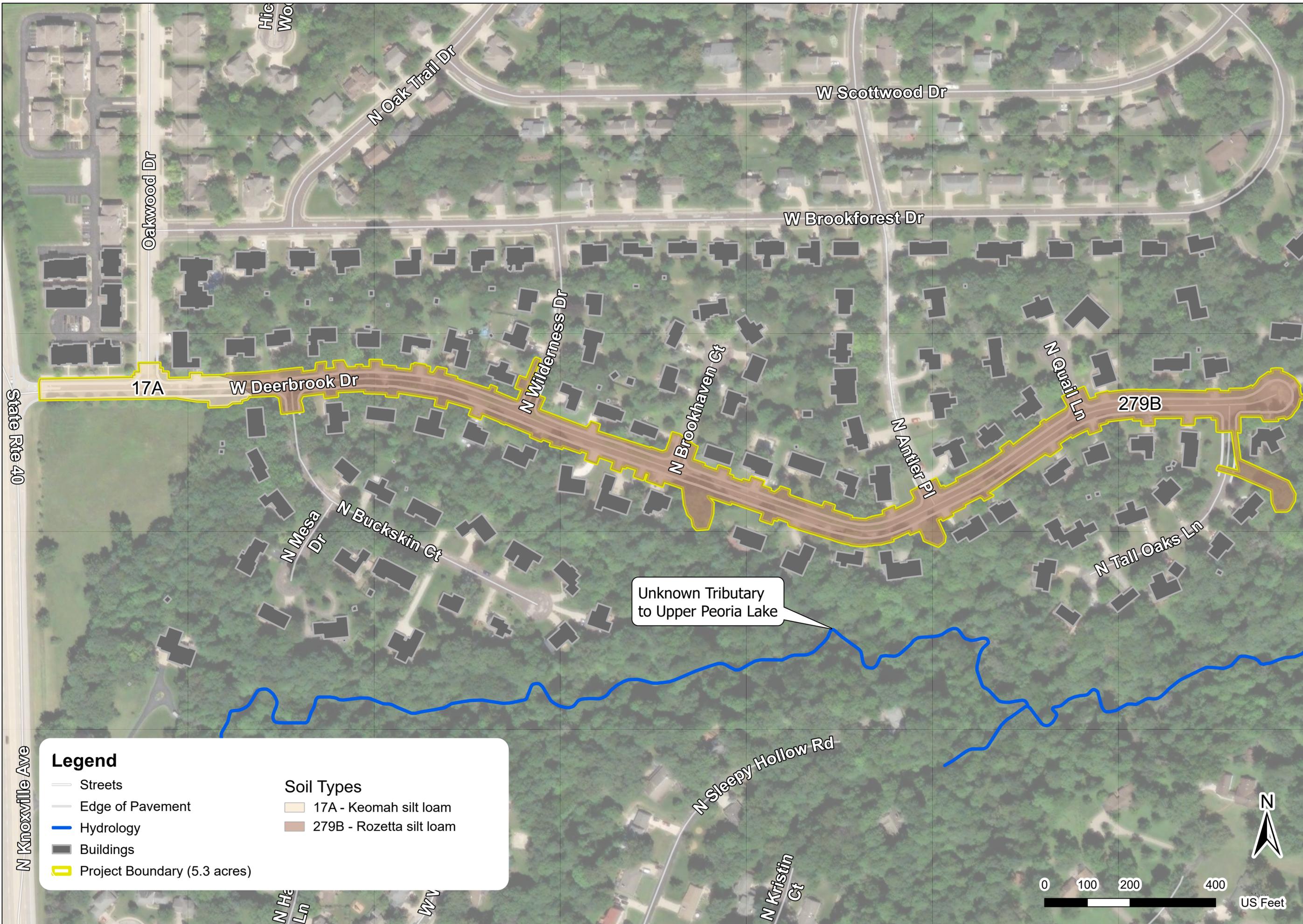


Appendix B
Site Maps

WEST DEERBROOK DRIVE ROADWAY RECONSTRUCTION PROJECT



Natural and Site Features



Unknown Tributary
to Upper Peoria Lake

Legend

- Streets
- Edge of Pavement
- Hydrology
- Buildings
- Project Boundary (5.3 acres)

Soil Types

- 17A - Keomah silt loam
- 279B - Rozetta silt loam

State Rte 40

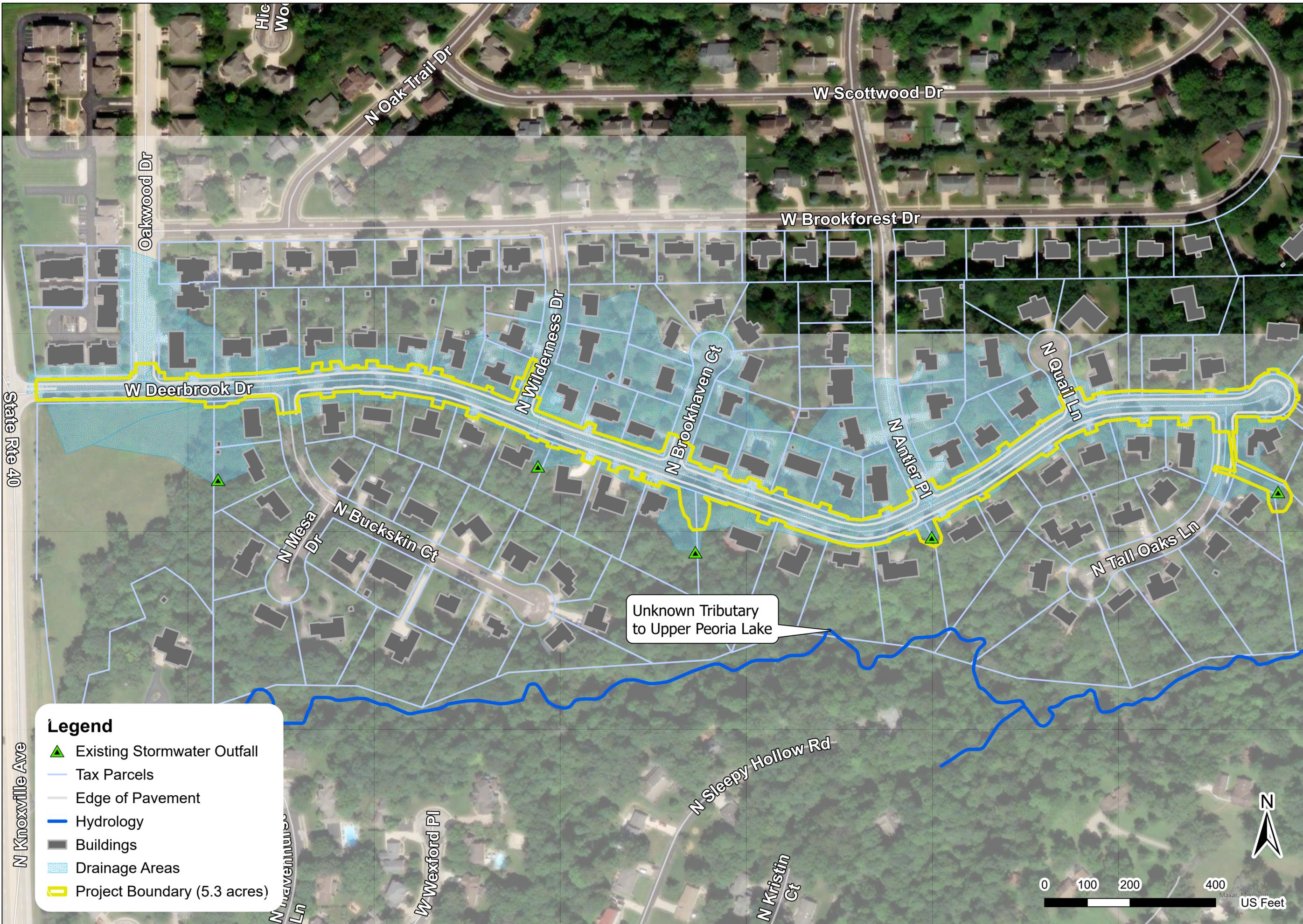
N Knoxville Ave

0 100 200 400 US Feet

WEST DEERBROOK DRIVE ROADWAY RECONSTRUCTION PROJECT



Project Hydrology



Appendix C
Construction General Permit

NPDES Permit No. ILR10

General NPDES Permit No. ILR10

Illinois Environmental Protection Agency
Division of Water Pollution Control
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276
www.epa.state.il.us

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

General NPDES Permit
For
Storm Water Discharges From Construction Site Activities

Expiration Date: August 31, 2028

Issue Date: September 13, 2023

Effective Date: September 22, 2023

In compliance with the provisions of the Illinois Environmental Protection Act, the Illinois Pollution Control Board Rules and Regulations (35 Ill. Adm. Code, Subtitle C, Chapter I), and the Clean Water Act, and the regulations thereunder the following discharges are authorized by this permit in accordance with the conditions and attachments herein.



Darin E. LeCrone, P.E.
Manager, Permit Section
Division of Water Pollution Control

Part I. COVERAGE UNDER THIS PERMIT

A. **Permit Area.** The permit covers all areas of the State of Illinois with discharges to any Waters of the United States.

B. **Eligibility.**

1. This permit shall authorize all discharges of storm water associated with industrial activity from a construction site that will result in the disturbance of one or more acres total land area or a construction site less than one acre of total land that is a part of a larger common plan of development or sale if the larger common plan will ultimately disturb one or more acres total land area. This permit may authorize discharges from other construction site activities that have been designated by the Agency as having the potential to adversely affect the water quality of Waters of the United States. Where discharges from construction sites were initially covered under the previous version of the ILR10, the Notice of Intent and Storm Water Pollution Prevention Plan must be updated/revised as necessary to ensure compliance with the provisions of this reissued ILR10 permit.
2. This permit may only authorize a storm water discharge associated with industrial activity from a construction site that is mixed with a storm water discharge from an industrial source other than construction, where:
 - a. the industrial source other than construction is located on the same site as the construction activity;
 - b. storm water discharges associated with industrial activity from the areas of the site where construction activities are occurring are in compliance with the terms of this permit; and
 - c. storm water discharges associated with industrial activity from the areas of the site where industrial activities other than construction are occurring (including storm water discharges from dedicated asphalt plants and dedicated concrete plants) are covered by a different NPDES general permit or an individual permit authorizing such discharges.
3. **Limitations on Coverage.** The following storm water discharges from construction sites are not authorized by this permit:
 - a. storm water discharges associated with industrial activities that originate from the site after construction activities have been completed and the site has undergone final stabilization;
 - b. discharges that are mixed with sources of non-storm water other than discharges identified in Part III.A (Prohibition on Non-Storm Water Discharges) of this permit and in compliance with paragraph IV.D.5 (Non-Storm Water Discharges) of this permit;

NPDES Permit No. ILR10

- c. storm water discharges associated with industrial activity that are subject to an existing NPDES individual or general permit or which are issued a permit in accordance with Part VI.N (Requiring an Individual Permit or an Alternative General Permit) of this permit. Such discharges may be authorized under this permit after an existing permit expires provided the existing permit did not establish numeric limitations for such discharges;
- d. storm water discharges from construction sites that the Agency has determined to be or may reasonably be expected to be contributing to a violation of a water quality standard;
- e. storm water discharges that the Agency, at its discretion, determines are not appropriately authorized or controlled by this general permit; and
- f. storm water discharges to any receiving water specified under 35 Ill. Adm. Code 302.105(d) (6).

C. Authorization.

- 1. In order for storm water discharges from construction sites to be authorized to discharge under this general permit a discharger must submit a Notice of Intent (NOI) in accordance with the requirements of Part II below.
- 2. Where a new contractor is selected after the submittal of an NOI under Part II below, or where site ownership is transferred, the Notice of Intent (NOI) must be modified by the owner in accordance with Part II within 30 days of commencement of work of the new contractor.
- 3. Unless notified by the Agency to the contrary, dischargers who submit an NOI and a stormwater pollution prevention plan (SWPPP) in accordance with the requirements of this permit are authorized to discharge storm water from construction sites under the terms and conditions of this permit in 30 days after the date the NOI and SWPPP are received by the Agency.
- 4. The Agency may deny coverage under this permit and require submittal of an application for an individual NPDES permit based on a review of the NOI or other information.

Part II. NOTICE OF INTENT REQUIREMENTS

A. Deadlines for Notification.

- 1. To receive authorization under this general permit, a discharger must submit a completed Notice of Intent (NOI) in accordance with Part VI.G (Signatory Requirements) and the requirements of this Part in sufficient time to allow a 30 day review period after the receipt of the NOI by the Agency and prior to the start of construction. In compliance with the Federal Electronic Reporting Rule, the Agency has transitioned all General Storm Water Permits for Construction Site Activities to the Central Data Exchange (CDX) system. NOIs shall be submitted electronically at <https://cdx.epa.gov>. More information, including registration information for the CDX system, can be obtained on the IEPA website, <https://epa.illinois.gov/topics/forms/water-permits/storm-water/construction.html>.
- 2. Where discharges associated with construction activities were initially covered under the previous version of ILR10 and are continuing, a new NOI and updated/revised Storm Water Pollution Prevention Plan must be submitted within 180 days of the effective date of this reissued permit, as necessary to ensure compliance with the provisions of the reissued ILR10. Updating of the SWPPP is not required if construction activities are completed and a Notice of Termination is submitted within 180 days of the effective date of this permit.
- 3. A discharger may submit an NOI in accordance with the requirements of this Part after the start of construction. In such instances, the Agency may bring an enforcement action for any discharges of storm water associated with industrial activity from a construction site that have occurred on or after the start of construction.

B. **Failure to Notify.** Dischargers who fail to notify the Agency of their intent to be covered, and discharge storm water associated with construction site activity to Waters of the United States without an NPDES permit are in violation of the Environmental Protection Act and Clean Water Act.

C. **Contents of Notice of Intent.** The Notice of Intent shall be signed in accordance with Part VI.G (Signatory Requirements) of this permit by all of the entities identified in paragraph 2 below and shall include the following information as prompted by the CDX system:

- 1. The mailing address, and location of the construction site for which the notification is submitted. Where a mailing address for the site is not available, the location can be described in terms of the latitude and longitude of the approximate center of the facility to the nearest 15 seconds, or the nearest quarter section (if the section, township and range is provided) that the construction site is located in;
- 2. The owner's name, address, telephone number, and status as Federal, State, private, public or other entity;
- 3. The name, address and telephone number of the general contractor(s) that have been identified at the time of the NOI submittal;
- 4. The name of the receiving water(s), or if the discharge is through a municipal separate storm sewer, the name of the municipal operator of the storm sewer and the ultimate receiving water(s), the latitude and longitude of the discharge point, and any known impairments and completed TMDLs for the receiving water;
- 5. The number of any NPDES permits for any discharge (including non-storm water discharges) from the site that is currently authorized by an NPDES permit;
- 6. A description of the project, detailing the complete scope of the project, estimated timetable for major activities, an estimate of the number of acres of the site on which soil will be disturbed, an indication of whether or not the installation of stormwater controls will require subsurface earth disturbance, an indication of whether or not the pre-development land was used for agriculture, and an indication of whether or not the project will include demolition of structures built or renovated before January 1, 1980;
- 7. For projects that have complied with State law on historic preservation and endangered species prior to submittal of the NOI, through coordination with the Illinois Historic Preservation Agency and the Illinois Department of Natural Resources or through fulfillment of the terms of interagency

NPDES Permit No. ILR10

agreements with those agencies, the NOI shall indicate that such compliance has occurred.

8. An indication of whether or not polymers, flocculants, cationic treatment chemicals, or other treatment chemicals will be used at the construction site;
9. An electronic copy of the storm water pollution prevention plan that has been prepared for the site in accordance with Part IV of this permit.
10. The notice of intent shall be modified using the CDX system for any substantial modifications to the project such as: address changes, new contractors, area coverage, additional discharges to Waters of the United States, or other substantial modifications. The notice of intent shall be modified within 30 days of the modification to the project.

D. Where to Submit.

Construction activities which discharge storm water that requires a NPDES permit submit an NOI to the Agency. The applicable fee shall also be submitted. NOIs must be signed in accordance with Part VI.G (Signatory Requirements) of this permit. The NOI and SWPPP must be submitted to the Agency electronically using the CDX system with digital signature at the following website address: <https://cdx.epa.gov>. Registration specific to the permittee is required in order to file electronically.

Submit the appropriate fee with the permit ID number assigned during completion of the NOI to the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control, Mail Code #15
Attention: Permit Section
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

- E. **Additional Notification.** Construction activities that are operating under approved local sediment and erosion plans, land disturbance permits, grading plans, or storm water management plans, in addition to filing copies of the Notice of Intent in accordance with Part D above, shall also submit signed copies of the Notice of Intent to the local agency approving such plans in accordance with the deadlines in Part A above. See Part IV.D.2.d (Approved State or Local Plans). A copy of the NOI shall be sent to the entity holding an active General NPDES Permit No. ILR40 if the permittee is located in an area covered by an active ILR40 permit.
- F. **Notice of Termination.** Where a site has completed final stabilization and all storm water discharges from construction activities that are authorized by this permit are eliminated, the permittee must submit a completed Notice of Termination (NOT) that is signed in accordance with Part VI.G (Signatory Requirements) of this permit. All Notices of Termination are to be submitted to the Agency electronically using the CDX system with digital signatures, at the web address listed in Part II.D.

Part III. SPECIAL CONDITIONS, MANAGEMENT PRACTICES, AND OTHER NON-NUMERIC LIMITATIONS

A. Prohibition on Non-Storm Water Discharges.

1. Except as provided in Part I paragraph B.2 and paragraphs 2, 3 or 4 below, all discharges covered by this permit shall be comprised entirely of storm water.
2.
 - a. Except as provided in paragraph b below, discharges of materials other than storm water must be in compliance with a NPDES permit (other than this permit) issued for the discharge.
 - b. The following non-storm water discharges may be authorized by this permit provided the non-storm water component of the discharges is in compliance with Part IV.D.5 (Non-Storm Water Discharges): discharges from fire fighting activities; fire hydrant flushings; waters used to wash vehicles where detergents are not used; waters used to control dust; potable water sources including uncontaminated waterline flushings; landscape irrigation drainages; routine external building washdown which does not use detergents; pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used; uncontaminated air conditioning condensate; uncontaminated spring water; uncontaminated ground water; and foundation or footing drains where flows are not contaminated with process materials such as solvents.
3. The following non-storm water discharges are prohibited by this permit: concrete and wastewater from washout of concrete (unless managed by an appropriate control), wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials, fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance, soaps, solvents, or detergents, toxic or hazardous substances from a spill or other release, or any other pollutant that could cause or tend to cause water pollution.
4. Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, are allowable if managed by appropriate controls.
 - a. Dewatering discharges shall be routed through a sediment control (e.g., sediment trap or basin, pumped water filter bag) designed to minimize discharges with visual turbidity;
 - b. The discharge shall not include visible floating solids or foam;
 - c. The discharge must not cause the formation of a visible sheen on the water surface, or visible oily deposits on the bottom or shoreline of the receiving water. An oil-water separator or suitable filtration device shall be used to treat oil, grease, or other similar products if dewatering water is found to or expected to contain these materials;
 - d. To the extent feasible, use well-vegetated (e.g., grassy or wooded), upland areas of the site to infiltrate dewatering water before discharge. You are prohibited from using receiving waters as part of the treatment area;
 - e. To minimize dewatering-related erosion and related sediment discharges, use stable, erosion-resistant surfaces (e.g., well-vegetated

NPDES Permit No. ILR10

grassy areas, clean filter stone, geotextile underlayment) to discharge from dewatering controls. Do not place dewatering controls, such as pumped water filter bags, on steep slopes (15% or greater in grade);

- f. Backwash water (water used to backwash/clean any filters used as part of stormwater treatment) must be properly treated or hauled off-site for disposal; and
- g. Dewatering treatment devices shall be properly maintained.

B. Discharges into Receiving Waters with an Approved Total Maximum Daily Load (TMDL):

Discharges to waters for which there is a TMDL allocation for sediment or a parameter that addresses sediment (such as total suspended solids, turbidity, or siltation) are not eligible for coverage under this permit unless the owner/operator develops and certifies a SWPPP that is consistent with wasteload allocations in the approved TMDL. To be eligible for coverage under this general permit, operators must incorporate into their SWPPP any conditions and/or Best Management Practices applicable to their discharges necessary for consistency with the TMDL within any timeframes established in the TMDL. If a specific numeric waste load allocation has been established that would apply to the project's discharges, the operator must incorporate that allocation into its SWPPP and implement necessary steps to meet that allocation.

Please refer to the Agency website at: <https://epa.illinois.gov/topics/water-quality/watershed-management/tmdls/reports.html>

- C. In the absence of information demonstrating otherwise, it is expected that compliance with the conditions in this permit will result in stormwater discharges being controlled as necessary to meet applicable water quality standards. If at any time you become aware, that discharges are not being controlled as necessary to meet applicable water quality standards, you must take corrective action as required in Part IV.D.5 of this Permit. Discharges covered by this permit, alone or in combination with other sources, shall not cause or contribute to a violation of any applicable water quality standard.

Part IV. STORM WATER POLLUTION PREVENTION PLANS

A storm water pollution prevention plan shall be developed for each construction site covered by this permit. Storm water pollution prevention plans shall be prepared in accordance with good engineering practices. The plan shall identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges associated with construction site activity from the facility. In addition, the plan shall describe and ensure the implementation of best management practices which will be used to reduce the pollutants in storm water discharges associated with construction site activity and to assure compliance with the terms and conditions of this permit. The permittee must implement the provisions of the storm water pollution prevention plan required under this part as a condition of this permit.

A. Deadlines for Plan Preparation and Compliance.

The plan shall:

- 1. Be completed prior to the start of the construction activities to be covered under this permit and submitted electronically to the Agency at the time the Notice of Intent is submitted; and
- 2. Provide for compliance with the terms and schedules of the plan beginning with the initiation of construction activities.

B. Signature, Plan Review and Notification.

- 1. The plan shall be signed in accordance with Part VI.G (Signatory Requirements), and be retained at the construction site which generates the storm water discharge in accordance with Part VI.E (Duty to Provide Information) of this permit. If an on-site location is unavailable to keep the SWPPP when no personnel are present, notice of the plan's location must be posted near the main entrance of the construction site.
- 2. Prior to commencement of construction, the permittee shall provide the plan to the Agency.
- 3. The permittee shall make plans available upon request from this Agency or a local agency approving sediment and erosion plans, grading plans, or storm water management plans; or in the case of a storm water discharge associated with industrial activity which discharges through a municipal separate storm sewer system. A list of permitted municipal separate storm sewer systems is available at: <https://epa.illinois.gov/topics/forms/water-permits/storm-water/urbanized-area-list.htm>
- 4. The Agency may notify the permittee at any time that the plan does not meet one or more of the minimum requirements of this Part. Such notification shall identify those provisions of the permit which are not being met by the plan, and identify which provisions of the plan require modifications in order to meet the minimum requirements of this part. Within 7 days from receipt of notification from the Agency, the permittee shall make the required changes to the plan and shall submit to the Agency a written certification that the requested changes have been made. Failure to comply shall terminate authorization under this permit.
- 5. A copy of the letter of notification of coverage along with the General NPDES Permit for Storm Water Discharges from Construction Site Activities or other indication that storm water discharges from the site are covered under an NPDES permit shall be posted at the site in a prominent place for public viewing (such as alongside a building permit).
- 6. All storm water pollution prevention plans and all completed inspection forms/reports required under this permit are considered reports that shall be available to the public within 30 days upon request. If a storm water pollution prevention plan or inspection form/report cannot be provided, the permittee shall respond to the request within 30 days with a statement that explains why the document cannot be provided. However, the permittee may claim any portion of a storm water pollution prevention plan as confidential in accordance with 40 CFR Part 2.

- C. **Keeping Plans Current.** The permittee shall amend the plan whenever there is a change in design, construction, operation, or maintenance, which has a significant effect on the potential for the discharge of pollutants to Waters of the United States and which has not otherwise been addressed in the plan or if the storm water pollution prevention plan proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified under paragraph D.2 below, or in otherwise achieving the general objectives of controlling pollutants in storm water discharges associated with construction site activity. In addition, the plan shall be amended to identify any new contractor and/or subcontractor that will implement a measure

NPDES Permit No. ILR10

of the storm water pollution prevention plan. Amendments to the plan may be reviewed by the Agency in the same manner as Part IV.B above. The SWPPP and site map must be modified within 7 days for any changes to construction plans, stormwater controls or other activities at the site that are no longer accurately reflected in the SWPPP. Any revisions of the documents for the storm water pollution prevention plan shall be kept on site at all times.

D. Contents of Plan. The storm water pollution prevention plan shall include the following items:

1. **Site Description.** Each plan shall provide a description of the following:
 - a. A description of the nature of the construction activity or demolition work;
 - b. A description of the intended sequence of major activities which disturb soils for major portions of the site (e.g. clearing, grubbing, excavation, grading, on-site or off-site stockpiling of soils, on-site or off-site storage of materials);
 - c. An estimate of the total area of the site and the total area of the site that is expected to be disturbed by clearing, grubbing, excavation, grading, on-site or off-site stockpiling of soils and storage of materials, or other activities;
 - d. An estimate of the runoff coefficient of the site after construction activities are completed and existing data describing the soil or the quality of any discharge from the site;
 - e. A site map indicating drainage patterns and approximate slopes anticipated before and after major grading activities, locations where vehicles enter or exit the site and controls to prevent offsite sediment tracking, areas of soil disturbance, the location of major structural and nonstructural controls identified in the plan, the location of areas where stabilization practices are expected to occur, locations of on-site or off-site soil stockpiling or material storage, surface waters (including wetlands), and locations where storm water is discharged to a surface water or MS4. For sites discharging to an MS4, a separate map identifying the location of the construction site and the location where the MS4 discharges to surface water must also be included; and
 - f. The name of the receiving water(s) and the ultimate receiving water(s), and areal extent of wetland acreage at the site.
2. **Controls.** Each plan shall include a description of appropriate controls that will be implemented at the construction site and any off-site stockpile or storage area unless already authorized by a separate NPDES permit. The plan shall include details or drawings that show proper installation of controls and BMPs. The Illinois Urban Manual <https://illinoisurbanmanual.org/> or other similar documents shall be used for developing the appropriate management practices, controls or revisions of the plan. The plan will clearly describe for each major activity identified in paragraph D.1 above, appropriate controls and the timing during the construction process that the controls will be implemented. For example, perimeter controls for one portion of the site will be installed after the clearing and grubbing necessary for installation of the measure, but before the clearing and grubbing for the remaining portions of the site. Perimeter controls will be actively maintained and/or repaired until final stabilization of those portions of the site upward of the perimeter control. Temporary perimeter controls will be removed after final stabilization. The description of controls shall address as appropriate the following minimum components:
 - a. **Erosion and Sediment Controls.** The permittee shall design, install and maintain effective erosion controls and sediment controls to minimize the discharge of pollutants. At a minimum, such controls must be designed, installed and maintained to:
 - (i) Control storm water volume and velocity within the site to minimize soil erosion;
 - (ii) Control storm water discharges, including both peak flowrates and total storm water volume, to minimize erosion at outlets and to minimize downstream channel and streambank erosion;
 - (iii) Minimize the amount of soil exposed during construction activity through the use of project phasing or other appropriate techniques;
 - (iv) Minimize the disturbance of steep slopes;
 - (v) Minimize sediment discharges from the site. The design, installation and maintenance of erosion and sediment controls must address factors such as the amount, frequency, intensity and duration of precipitation, the nature of resulting storm water runoff, and soil characteristics, including the range of soil particle sizes expected to be present on the site. Install sediment controls along any perimeter areas of the site that are downslope from any exposed soil or other disturbed areas, with both ends of the perimeter control installed upslope (e.g., at 45 degrees) to prevent stormwater from circumventing the edge of the perimeter control. After a storm event, if there is evidence of stormwater circumventing or undercutting the perimeter control, extend controls and/or repair undercut areas to fix the problem;
 - (vi) Provide and maintain natural buffers around surface waters, direct storm water to vegetated areas to increase sediment removal and maximize storm water infiltration, unless infiltration would be inadvisable due to the underlying geology (e.g. karst topography) and ground water contamination concerns, or infeasible due to site conditions;
 - (vii) Minimize soil compaction and, unless infeasible, preserve topsoil;
 - (viii) Minimize sediment track-out. Where sediment has been tracked-out from your site onto paved roads, sidewalks, or other paved areas outside of your site, remove the deposited sediment by the end of the same business day in which the track-out occurs or by the end of the next business day if track-out occurs on a non-business day. Remove the track-out by sweeping, shoveling, or vacuuming these surfaces, or by using other similarly effective means of sediment removal. You are prohibited from hosing or sweeping tracked-out sediment into any Water of the U.S., or to any stormwater conveyance or storm drain inlet, or constructed or natural site drainage features, unless the feature is connected to a sediment basin, sediment trap, or similarly effective control; and,
 - (ix) Minimize dust. On areas of exposed soils, minimize the generation of dust through the appropriate application of water or other dust suppression techniques.
 - b. **Stabilization Practices.** The storm water pollution prevention plan shall include a description of interim and permanent stabilization practices, including site-specific scheduling of the implementation of the practices. Site plans should ensure that existing vegetation is preserved where practicable and that disturbed portions of the site are stabilized. Stabilization practices may include: temporarily seeding, permanent seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, preservation of mature vegetation, staged or staggered development, and other appropriate measures. A record of the dates when major grading activities occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated, shall be included in the plan. Stabilization of disturbed areas must, at a minimum, be initiated immediately whenever any clearing, grading, excavating or other earth disturbing activities have permanently ceased on any portion of the site, or temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days. Stabilization of disturbed areas must be initiated within 1 working

NPDES Permit No. ILR10

day of permanent or temporary cessation of earth disturbing activities and shall be completed as soon as possible but not later than 14 days from the initiation of stabilization work in an area. Exceptions to these time frames are specified as provided in paragraphs (i) and (ii) below:

- (i) Where the initiation of stabilization measures is precluded by snow cover, stabilization measures shall be initiated as soon as practicable.
 - (ii) On areas where construction activity has temporarily ceased and will resume after 14 days, a temporary stabilization method can be used. Temporary stabilization techniques and materials shall be described in the SWPPP.
 - (iii) Stabilization is not required for exit points at linear utility construction sites that are used only episodically and for very short durations over the life of the project, provided other exit point controls are implemented to minimize sediment track-out.
- c. **Structural Practices.** A description of structural practices utilized to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Such practices may include silt fences, earth dikes, drainage swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins. Structural practices should be placed on upland soils to the degree practicable. The installation of these devices may be subject to Section 404 of the CWA.
- (i) The following design requirements apply to sediment basins if such structural practices will be installed to reduce sediment concentrations in storm water discharges:
 - a. When discharging from the sediment basin, utilize outlet structures that withdraw water from the surface in order to minimize the discharge.
 - b. Minimize erosion of the sediment basin using stabilization controls (e.g., erosion control blankets), at the inlet and outlet using erosion controls and velocity dissipation devices:
 - c. Sediment basins shall be designed to facilitate maintenance, including sediment removal from the basins, as necessary.
 - (ii) The following requirements apply to protecting storm drain inlets:
 - a. Install inlet protection measures that minimize sediment from discharges prior to entry into any storm drain inlet that carries stormwater flow from your site to a water of the U.S., provided you have authority to access the storm drain inlet; and
 - b. Clean, or remove and replace, the protection measures as sediment accumulates, the filter becomes clogged, and/or performance is compromised. Where there is evidence of sediment accumulation adjacent to the inlet protection measure, remove the deposited sediment by the end of the same business day in which it is found or by the end of the following business day if removal by the same business day is not feasible.
 - c. Where inlet protection measures are not required because the storm drain inlets to which your site discharges are conveyed to a sediment basin, sediment trap, or similarly effective control, include a short description of the control that receives the stormwater flow from the site.
- d. **Use of Treatment Chemicals.** Identify the use of all polymer flocculants or treatment chemicals at the site. Dosage of treatment chemicals shall be identified along with any information from any Material Safety Data Sheet. Describe the location of all storage areas for chemicals. Include any information from the manufacturer's specifications. Treatment chemicals must be stored in areas where they will not be exposed to precipitation. The SWPPP must describe procedures for use of treatment chemicals and staff responsible for use/application of treatment chemicals must be trained on the established procedures.
- e. **Best Management Practices for Impaired Waters.** For any site which discharges directly to an impaired water identified on the Agency's website for 303(d) listing for suspended solids, turbidity, or siltation the storm water pollution prevention plan shall be designed for a storm event equal to or greater than a 25-year 24-hour rainfall event. If required by federal regulations or the Illinois Urban Manual, the storm water pollution prevention plan shall adhere to a more restrictive design criteria. Please refer to the Agency's website at: <https://epa.illinois.gov/topics/water-quality/watershed-management/tmdls/303d-list.html>
- f. **Pollution Prevention.** The permittee shall design, install, implement, and maintain effective pollution prevention measures to minimize the discharge of pollutants. At a minimum, such measures must be designed, installed, implemented and maintained to:
- (i) Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;
 - (ii) Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site to precipitation and to storm water. Minimization to exposure is not required for any products or materials where the exposure to precipitation and to stormwater will not result in a discharge of pollutants, or when exposure of a specific material or product poses little risk of stormwater contamination (such as final products and materials intended for outdoor use);
 - (iii) Minimize the exposure of fuel, oil, hydraulic fluids, other petroleum products, and other chemicals by storing in covered areas or containment areas. Any chemical container with a storage of 55 gallons or more must be stored a minimum of 50 feet from receiving waters, constructed or natural site drainage features, and storm drain inlets. If infeasible due to site constraints, store containers as far away as the site permits and document in your SWPPP the specific reasons why the 50-foot setback is infeasible and how the containers will be stored; and
 - (iv) Minimize the discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures.
- g. **Other Controls.**
- (i) **Waste Disposal.** No solid materials, including building materials, shall be discharged to Waters of the United States, except as authorized by a Section 404 permit.
 - (ii) The plan shall ensure and demonstrate compliance with applicable State and/or local waste disposal, sanitary sewer or septic system regulations.
 - (iii) For construction sites that receive concrete or asphalt from off-site locations, the plan must identify and include appropriate controls and measures to reduce or eliminate discharges from these activities.
 - (iv) The plan shall include spill response procedures and provisions for reporting if there are releases in excess of reportable quantities.
 - (v) The plan shall ensure that regulated hazardous or toxic waste must be stored and disposed in accordance with any applicable State

NPDES Permit No. ILR10

and Federal regulations.

- h. **Best Management Practices for Post-Construction Storm Water Management.** Describe the measures that will be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed. Structural measures should be placed on upland soils to the degree attainable. The installation of these devices may be subject to Section 404 of the CWA. This permit only addresses the installation of storm water management measures, and not the ultimate operation and maintenance of such structures after the construction activities have been completed and the site has undergone final stabilization. Permittees are responsible for only the installation and maintenance of storm water management measures prior to final stabilization of the site, and are not responsible for maintenance after storm water discharges associated with industrial activity have been eliminated from the site.

- (i) While not mandatory, it is advisable that the permittee consider including in its storm water pollution prevention plan and design and construction plans methods of post-construction storm water management to retain the greatest amount of post-development storm water run-off practicable, given the site and project constraints. Such practices may include but are not limited to: storm water detention structures (including wet ponds); storm water retention structures; flow attenuation by use of open vegetated swales and natural depressions; infiltration of runoff onsite; and sequential systems (which combine several practices). Technical information on many post-construction storm water management practices is included in the Illinois Urban Manual (2017).

The storm water pollution prevention plan shall include an explanation of the technical basis used to select the practices to control pollution where post-construction flows will exceed predevelopment levels.

- (ii) Velocity dissipation devices shall be placed at discharge locations and along the length of any outfall channel as necessary to provide a non-erosive velocity flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g. maintenance of hydrologic conditions, such as the hydroperiod and hydrodynamics present prior to the initiation of construction activities).
- (iii) Unless otherwise specified in the Illinois Urban Manual (2017), the storm water pollution prevention plan shall be designed for a storm event equal to or greater than a 25-year 24-hour rainfall event.

i. **Approved State or Local Plans.**

- (i) The management practices, controls and other provisions contained in the storm water pollution prevention plan must be at least as protective as the requirements contained in the Illinois Urban Manual, (2017). Construction activities which discharge storm water must include in their storm water pollution prevention plan procedures and requirements specified in applicable sediment and erosion control plans or storm water management plans approved by local officials. Requirements specified in sediment and erosion control plans or site permits or storm water management site plans or site permits approved by local officials that are applicable to protecting surface water resources are, upon submittal of an NOI to be authorized to discharge under this permit, incorporated by reference and are enforceable under this permit. The plans shall include all requirements of this permit and include more stringent standards required by any local approval. This provision does not apply to provisions of master plans, comprehensive plans, non-enforceable guidelines or technical guidance documents that are not identified in a specific plan or permit that is issued for the construction site.
- (ii) Dischargers seeking alternative permit requirements are not authorized by this permit and shall submit an individual permit application in accordance with 40 CFR 122.26 at the address indicated in Part II.D (Where to Submit) of this permit, along with a description of why requirements in approved local plans or permits should not be applicable as a condition of an NPDES permit.

j. **Natural Buffers.** For any stormwater discharges from construction activities within 50 feet of a Waters of the United States, except for activities for water-dependent structures authorized by a Section 404 permit, the permittee shall:

- (i) Provide a 50-foot undisturbed natural buffer between the construction activity and the Waters of the United States; or
 (ii) Provide additional erosion and sediment controls within that area.

3. **Maintenance.**

- a. The plan shall include a description of procedures to maintain in good and effective operating conditions, all erosion and sediment control measures and other Best Management Practices, including vegetation and other protective measures identified in the Storm Water Pollution Prevention Plan.
- b. Where a basin has been installed to control sediment during construction activities, the Permittees shall keep the basin(s) in effective operating condition and remove accumulated sediment as necessary. Sediment shall be removed in accordance with the Illinois Urban Manual (2017) or more frequently. Maintenance of any sediment basin shall include a post construction clean out of accumulated sediment if the basin is to remain in place.
- c. Other erosion and sediment control structures shall be maintained and cleaned as necessary to keep structure(s) in effective operating condition, including removal of excess sediment as necessary.

4. **Inspections.** Qualified personnel (provided by the permittee) shall inspect disturbed areas of the construction site that have not been finally stabilized, structural control measures, and locations where vehicles enter or exit the site at least once every seven calendar days and within 24 hours of the end of a storm or by the end of the following business or work day that is 0.50 inches or greater. Qualified personnel means a person knowledgeable in the principles and practices of erosion and sediment controls measures, such as a licensed Professional Engineer (P.E.), a Certified Professional in Erosion and Sediment Control (CPESC), a Certified Erosion Sediment and Storm Water Inspector (CESSWI), a Certified Stormwater Inspector (CSI), a person that has successfully completed the Federal CGP Inspector Training offered by USEPA, or other knowledgeable person who possesses the skills to assess conditions at the construction site that could impact storm water quality and to assess the effectiveness of any sediment and erosion control measures selected to control the quality of storm water discharges from the construction activities. Areas inaccessible during inspections due to flooding or other unsafe conditions shall be inspected within 72 hours of becoming accessible.

NPDES Permit No. ILR10

- a. Inspections may be reduced to once per month when construction activities have ceased due to frozen conditions (when ground and/or air temperatures are at or below 32 degrees Fahrenheit). Weekly inspections will recommence when construction activities are conducted, or if there is a 0.50 inches or greater rain event, or a discharge due to snowmelt occurs.
- b. Disturbed areas, areas used for storage of materials that are exposed to precipitation and all areas where stormwater typically flows within the site shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the plan shall be observed to ensure that they are operating correctly. All locations where stabilization measures have been implemented shall be observed to ensure that they are still stabilized. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. Locations where vehicles enter or exit the site shall be inspected for evidence of offsite sediment tracking.
- c. For sites discharging dewatering water, you must conduct an inspection during the discharge, once per day on which the discharge occurs and record the following in a report within 24 hours of completing the inspection:
 - (i) The inspection date;
 - (ii) Names and titles of personnel performing the inspection;
 - (iii) Approximate times that the dewatering discharge began and ended on the day of inspection;
 - (iv) Estimates of the rate (in gallons per day) of discharge on the day of inspection;
 - (v) Whether or not any of the following indications of pollutant discharge were observed at the point of discharge: a sediment plume, suspended solids, unusual color, presence of odor, decreased clarity, or presence of foam; and/or a visible sheen on the water surface or visible oily deposits on the bottom or shoreline of the receiving water.
- d. Based on the results of the inspection, the description of potential pollutant sources identified in the storm water pollution prevention plan in accordance with Part IV.D.1 (Site Description) of this permit and the pollution prevention control measures identified in the plan in accordance with Part IV.D.2 (Controls) of this permit shall be revised as appropriate as soon as practicable after such inspection to minimize the potential for such discharges. Such modifications shall provide for timely implementation of any changes to the plan and pollution prevention control measures within 7 calendar days following the inspection.
- e. A report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with paragraph b above shall be made and retained as part of the storm water pollution prevention plan for at least three years from the date that the permit coverage expires or is terminated. All inspection reports shall be retained at the construction site. The report shall be signed in accordance with Part VI.G (Signatory Requirements) of this permit. Any flooding or other unsafe conditions that delay inspections shall be documented in the inspection report.
- f. The permittee shall notify the appropriate Agency Field Operations Section office by email at: epa.swnoncomp@illinois.gov, telephone or fax (see Attachment A) within 24 hours of any incidence of noncompliance for any violation of the storm water pollution prevention plan observed during any inspection conducted, or for violations of any condition of this permit. The permittee shall complete and submit within 5 days an "Incidence of Noncompliance" (ION) report for any violation of the storm water pollution prevention plan observed during any inspection conducted, or for violations of any condition of this permit. Submission shall be on forms provided by the Agency and include specific information on the cause of noncompliance, actions which were taken to prevent any further causes of noncompliance, and a statement detailing any environmental impact which may have resulted from the noncompliance. Corrective actions must be undertaken immediately to address the identified non-compliance issue(s).
- g. All reports of noncompliance shall be signed by a responsible authority as defined in Part VI.G (Signatory Requirements).
- h. After the initial contact has been made with the appropriate Agency Field Operations Section Office, all reports of noncompliance shall be mailed to the Agency at the following address:

Illinois Environmental Protection Agency
 Division of Water Pollution Control
 Compliance Assurance Section
 1021 North Grand Avenue East
 Post Office Box 19276
 Springfield, Illinois 62794-9276

5. Corrective Actions. You must take corrective action to address any of the following conditions identified at your site:

- a. A stormwater control needs repair or replacement; or
- b. A stormwater control necessary to comply with the requirements of this permit was never installed, or was installed incorrectly; or
- c. Your discharges are causing an exceedance of applicable water quality standards; or
- d. A prohibited discharge has occurred.

Corrective Actions shall be completed as soon as possible and documented within 7 days in an Inspection Report or report of noncompliance. If it is infeasible to complete the installation or repair within seven (7) calendar days, you must document in your records why it is infeasible to complete the installation or repair within the 7-day timeframe and document your schedule for installing the stormwater control(s) and making it operational as soon as feasible after the 7-day timeframe.

In the event that maintenance is required for the same stormwater control at the same location three or more times, the control shall be repaired in a manner that prevents continued failure to the extent feasible, and you must document the condition and how it was repaired in your records. Alternatively, you must document in your records why the specific recurrence of this same issue should continue to be addressed as a routine maintenance fix.

NPDES Permit No. ILR10

6. **Non-Storm Water Discharges.** Except for flows from fire fighting activities, sources of non-storm water listed in Part III.A.2 of this permit that are combined with storm water discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.
- E. **Additional requirements for storm water discharges from industrial activities other than construction, including dedicated asphalt plants, and dedicated concrete plants.** This permit may only authorize any storm water discharge associated with industrial activity from a construction site that is mixed with a storm water discharge from an industrial source other than construction, where:
1. The industrial source other than construction is located on the same site as the construction activity;
 2. Storm water discharges associated with industrial activity from the areas of the site where construction activities are occurring are in compliance with the terms of this permit; and
 3. Storm water discharges associated with industrial activity from the areas of the site where industrial activity other than construction are occurring (including storm water discharges from dedicated asphalt plants [other than asphalt emulsion facilities] and dedicated concrete plants) are in compliance with the terms, including applicable NOI or application requirements, of a different NPDES general permit or individual permit authorizing such discharges.
- F. **Contractors.**
1. The storm water pollution prevention plan must clearly identify for each measure identified in the plan, the contractor(s) or subcontractor(s) that will implement the measure. All contractors and subcontractors identified in the plan must sign a copy of the certification statement in paragraph 2 below in accordance with Part VI.G (Signatory Requirements) of this permit. All certifications must be included in the storm water pollution prevention plan except for owners that are acting as contractors.
 2. **Certification Statement.** All contractors and subcontractors identified in a storm water pollution prevention plan in accordance with paragraph 1 above shall sign a copy of the following certification statement before conducting any professional service at the site identified in the storm water pollution prevention plan:

"I certify under penalty of law that I understand the terms and conditions of the general National Pollutant Discharge Elimination System (NPDES) permit (ILR10) that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification."

The certification must include the name and title of the person providing the signature in accordance with Part VI.G of this permit: the name, address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification is made.

Part V. RETENTION OF RECORDS

- A. The permittee shall retain copies of storm water pollution prevention plans and all reports and notices required by this permit, records of all data used to complete the Notice of Intent to be covered by this permit and the Agency Notice of Permit Coverage letter for a period of at least three years from the date that the permit coverage expires or is terminated. This period may be extended by request of the Agency at any time.
- B. The permittee shall retain a copy of the storm water pollution prevention plan and any revisions to said plan required by this permit at the construction site from the date of project initiation to the date of final stabilization. Any manuals or other documents referenced in the SWPPP shall also be retained at the construction site.

Part VI. STANDARD PERMIT CONDITIONS

- A. **Duty to Comply.** The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Illinois Environmental Protection Act and the CWA and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. Failure to obtain coverage under this permit or an individual permit for storm water releases associated with construction activities is a violation of the Illinois Environmental Protection Act and the CWA.
- B. **Continuation of the Expired General Permit.** This permit expires five years from the date of issuance. An expired general permit continues in force and effect until a new general permit or an individual permit is issued. Only those construction activities authorized to discharge under the expiring general permit are covered by the continued permit.
- C. **Need to halt or reduce activity not a defense.** It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- D. **Duty to Mitigate.** The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
- E. **Duty to Provide Information.** The permittee shall furnish within a reasonable time to the Agency or local agency approving sediment and erosion control plans, grading plans, or storm water management plans; or in the case of a storm water discharge associated with industrial activity which discharges through a municipal separate storm sewer system with an NPDES permit, to the municipal operator of the system, any information which is requested to determine compliance with this permit. Upon request, the permittee shall also furnish to the Agency or local agency approving sediment and erosion control plans, grading plans, or storm water management plans; or in the case of a storm water discharge associated with industrial activity which discharges through a municipal separate storm sewer system with an NPDES permit, to the municipal operator of the system, copies of all records required to be kept by this permit.
- F. **Other Information.** When the permittee becomes aware that he or she failed to submit any relevant facts or submitted incorrect information in the Notice of Intent or in any other report to the Agency, he or she shall promptly submit such facts or information.
- G. **Signatory Requirements.** All Notices of Intent, storm water pollution prevention plans, reports, certifications or information either submitted to the

NPDES Permit No. ILR10

Agency or the operator of a large or medium municipal separate storm sewer system, or that this permit requires be maintained by the permittee, shall be signed.

1. All Notices of Intent shall be signed as follows:

- a. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (1) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or (2) any person authorized to sign documents that has been assigned or delegated said authority in accordance with corporate procedures;
- b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
- c. For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes (1) the chief executive officer of the agency, or (2) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

2. All reports required by the permit and other information requested by the Agency shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

- a. The authorization is made in writing by a person described above and submitted to the Agency.
- b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of manager, operator, superintendent, or position of equivalent responsibility or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position).
- c. **Changes to Authorization.** If an authorization under Part I.C (Authorization) is no longer accurate because a different individual or position has responsibility for the overall operation of the construction site, a new authorization satisfying the requirements of Part I.C must be submitted to the Agency prior to or together with any reports, information, or applications to be signed by an authorized representative.
- d. **Certification.** Any person signing documents under this Part shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

- H. **Penalties for Falsification of Reports.** Section 309(c)(4) of the Clean Water Act provides that any person who knowingly makes any false material statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or by both. Section 44(j)(4) and (5) of the Environmental Protection Act provides that any person who knowingly makes any false statement, representation, or certification in an application form, or form pertaining to a NPDES permit commits a Class A misdemeanor, and in addition to any other penalties provided by law is subject to a fine not to exceed \$10,000 for each day of violation.
- I. **Penalties for Falsification of Monitoring Systems.** The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by fines and imprisonment described in Section 309 of the CWA. The Environmental Protection Act provides that any person who knowingly renders inaccurate any monitoring device or record required in connection with any NPDES permit or with any discharge which is subject to the provisions of subsection (f) of Section 12 of the Act commits a Class A misdemeanor, and in addition to any other penalties provided by law is subject to a fine not to exceed \$10,000 for each day of violation.
- J. **Oil and Hazardous Substance Liability.** Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under section 311 of the CWA.
- K. **Property Rights.** The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.
- L. **Severability.** The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.
- M. **Transfers.** This permit is not transferable to any person except after notice to the Agency. The Agency may require the discharger to apply for and obtain an individual NPDES permit as stated in Part I.C (Authorization).
- N. **Requiring an Individual Permit or an Alternative General Permit.**

NPDES Permit No. ILR10

1. The Agency may require any person authorized by this permit to apply for and/or obtain either an individual NPDES permit or an alternative NPDES general permit. Any interested person may petition the Agency to take action under this paragraph. Where the Agency requires a discharger authorized to discharge under this permit to apply for an individual NPDES permit, the Agency shall notify the discharger in writing that a permit application is required. This notification shall include a brief statement of the reasons for this decision, an application form, a statement setting a deadline for the discharger to file the application, and a statement that on the effective date of the individual NPDES permit or the alternative general permit as it applies to the individual permittee, coverage under this general permit shall automatically terminate. Applications shall be submitted to the Agency indicated in Part II.D (Where to Submit) of this permit. The Agency may grant additional time to submit the application upon request of the applicant. If a discharger fails to submit in a timely manner an individual NPDES permit application as required by the Agency under this paragraph, then the applicability of this permit to the individual NPDES permittee is automatically terminated at the end of the day specified by the Agency for application submittal. The Agency may require an individual NPDES permit based on:
 - a. information received which indicates the receiving water may be of particular biological significance pursuant to 35 Ill. Adm. Code 302.105(d)(6);
 - b. whether the receiving waters are impaired waters for suspended solids, turbidity or siltation as identified by the Agency's 303(d) listing;
 - c. size of construction site, proximity of site to the receiving stream, etc.

The Agency may also require monitoring of any storm water discharge from any site to determine whether an individual permit is required.

2. Any discharger authorized by this permit may request to be excluded from the coverage of this permit by applying for an individual permit. In such cases, the permittee shall submit an individual application in accordance with the requirements of 40 CFR 122.26(c)(1)(ii), with reasons supporting the request, to the Agency at the address indicated in Part II.D (Where to Submit) of this permit. The request may be granted by issuance of any individual permit or an alternative general permit if the reasons cited by the permittee are adequate to support the request.
 3. When an individual NPDES permit is issued to a discharger otherwise subject to this permit, or the discharger is authorized to discharge under an alternative NPDES general permit, the applicability of this permit to the individual NPDES permittee is automatically terminated on the effective date of the individual permit or the date of authorization of coverage under the alternative general permit, whichever the case may be. When an individual NPDES permit is denied to a discharger otherwise subject to this permit or the discharger is denied for coverage under an alternative NPDES general permit, the applicability of this permit to the individual NPDES permittee remains in effect, unless otherwise specified by the Agency.
- O. **State/Environmental Laws.** No condition of this permit shall release the permittee from any responsibility or requirements under other environmental statutes or regulations.
- P. **Proper Operation and Maintenance.** The permittee shall at all times properly operate and maintain all construction activities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit and with the requirements of storm water pollution prevention plans. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed by a permittee only when necessary to achieve compliance with the conditions of the permit.
- Q. **Inspection and Entry.** The permittee shall allow the IEPA, or an authorized representative upon presentation of credentials and other documents as may be required by law, to:
1. Enter upon the permittee's premises where a regulated construction activity is located or conducted, or where records must be kept under the conditions of this permit;
 2. Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit;
 3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
 4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.
- R. **Permit Actions.** This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- S. **Bypasses and Upsets.** The provisions of 40 CFR Section 122.41(m) & (n) are applicable and are hereby incorporated by reference.

Part VII. REOPENER CLAUSE

- A. If there is evidence indicating potential or realized impacts on water quality due to any storm water discharge associated with industrial activity covered by this permit, the discharger may be required to obtain an individual permit or an alternative general permit in accordance with Part I.C (Authorization) of this permit or the permit may be modified to include different limitations and/or requirements.
- B. Permit modification or revocation will be conducted according to provisions of 35 Ill. Adm. Code, Subtitle C, Chapter I and the provisions of 40 CFR 122.62, 122.63, 122.64 and 124.5 and any other applicable public participation procedures.
- C. The Agency will reopen and modify this permit under the following circumstances:
 1. the U.S. EPA amends its regulations concerning public participation;

NPDES Permit No. ILR10

2. a court of competent jurisdiction binding in the State of Illinois or the 7th Circuit Court of Appeals issues an order necessitating a modification of public participation for general permits; or
3. to incorporate federally required modifications to the substantive requirements of this permit.

Part VIII. DEFINITIONS

"Agency" means the Illinois Environmental Protection Agency.

"Best Management Practices" ("BMPs") means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control construction site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

"Commencement of Construction or Demolition Activities" The initial disturbance of soils associated with clearing, grading, or excavating activities or other construction or demolition activities.

"Common Plan of Development or Sale" A contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under one common plan. The "common plan" of development or sale is broadly defined as any announcement or piece of documentation (including a sign, public notice or hearing, sales pitch, advertisement, drawing, permit application, zoning request, computer design, etc.) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating construction activities may occur on a specific plot.

"Construction Activities" Earth disturbing activities, such as clearing, grading and excavation of land. For purposes of this permit, construction activities also means construction site, construction site activities, or site. Construction activities also include any demolition activities at a site.

"Construction Site" or "Site" The land or water area where construction activities will occur and where stormwater controls will be installed and maintained. The construction site includes construction support activities, which may be located at a different part of the property from where the primary construction activity will take place, or on a different piece of property altogether.

"Construction Support Activity" A construction-related activity that specifically supports the construction activity and involves earth disturbance or pollutant-generating activities of its own, and can include activities associated with concrete or asphalt batch plants, equipment staging yards, materials storage areas, excavated material disposal areas, and borrow areas.

"Contractor" means a person or firm that undertakes a contract to provide materials or labor to perform a service or do a job related to construction of the project authorized by this permit,

"CWA" means Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Pub. L. 92-500, as amended Pub. L. 95-217, Pub. L. 95-576, Pub. L. (96-483 and Pub. L. 97-117, 33 U.S.C. 1251 et seq.).

"Dedicated portable asphalt plant" A portable asphalt plant that is located on or contiguous to a construction site and that provides asphalt only to the construction site that the plant is located on or adjacent to. The term dedicated portable asphalt plant does not include facilities that are subject to the asphalt emulsion effluent limitation guideline at 40 CFR 443.

"Dedicated portable concrete plant" A portable concrete plant that is located on or contiguous to a construction site and that provides concrete only to the construction site that the plant is located on or adjacent to.

"Dedicated sand or gravel operation" An operation that produces sand and/or gravel for a single construction project.

"Director" means the Director of the Illinois Environmental Protection Agency or an authorized representative.

"Final Stabilization" means that all soil disturbing activities at the site have been completed, and either of the two following conditions are met:

- (i) A uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a density of 70 percent of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or
- (ii) Equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.

For individual lots in residential construction, final stabilization means that either:

- (i) The homebuilder has completed final stabilization as specified above, or
- (ii) The homebuilder has established temporary stabilization including perimeter controls for an individual lot prior to occupation of the home by the homeowner and informing the homeowner of the need for, and benefits of, final stabilization.

"Impairment" is the status of a surface water in which an applicable water quality standard is not being attained for a particular pollutant.

"Large and Medium municipal separate storm sewer system" means all municipal separate storm sewers that are either:

- (i) Located in an incorporated place (city) with a population of 100,000 or more as determined by the latest Decennial Census by the Bureau of Census (these cities are listed in Appendices F and G of 40 CFR Part 122); or
- (ii) Located in the counties with unincorporated urbanized populations of 100,000 or more, except municipal separate storm sewers that are located in the incorporated places, townships or towns within such counties (these counties are listed in Appendices H and I of 40 CFR Part 122); or
- (iii) Owned or operated by a municipality other than those described in paragraph (i) or (ii) and that are designated by the Director as part of the large or medium municipal separate storm sewer system.

NPDES Permit No. ILR10

"NOI" means notice of intent to be covered by this permit (see Part II of this permit.)

"NOT" means notice of termination of coverage by this permit (See Part II of this permit.)

"Point Source" means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharges. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.

"Runoff coefficient" means the fraction of total rainfall that will appear at the conveyance as runoff.

"Storm Water" means storm water runoff, snow melt runoff, and surface runoff and drainage.

"Storm Water Control" means any best management practice or other method (including narrative effluent limitations) used to prevent or reduce the discharge of pollutants to waters of the United States.

"Total Maximum Daily Loads (TMDLs)" The calculation of the maximum amount of a pollutant allowed to enter a waterbody so that the waterbody will meet and continue to meet water quality standards for that particular pollutant. A TMDL determines a pollutant reduction target and allocates load reductions necessary to the source(s) of the pollutant.

"Turbidity" means a condition of water quality characterized by the presence of suspended solids and/or organic material.

"Waters" mean all accumulations of water, surface and underground, natural, and artificial, public and private, or parts thereof, which are wholly or partially within, flow through, or border upon the State of Illinois, except that sewers and treatment works are not included except as specially mentioned; provided, that nothing herein contained shall authorize the use of natural or otherwise protected waters as sewers or treatment works except that in-stream aeration under Agency permit is allowable.

"Work day" for the purpose of this permit, a work day is any calendar day on which construction activities will take place.

Attachment A

Division of Water Pollution Control
Regions by County

Des Plaines Region (FOS 2) Manager 847/294-4000

Boone Kane Ogle	Cook Kankakee Stephenson	DeKalb Kendall Will	DuPage Lake Winnebago	Grundy Lee	Jo Daviess McHenry
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Peoria Region (FOS 3) Manager 309/671-3022

Bureau Knox Putnam Woodford	Carroll LaSalle Rock Island	Fulton Marshall Stark	Hancock McDonough Tazewell	Henderson Mercer Warren	Henry Peoria Whiteside
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Champaign Region (FOS 4) Manager 217/278-5800

Champaign Douglas Livingston Vermilion	Clark Edgar Macon	Coles Effingham McLean	Crawford Ford Moultrie	Cumberland Iroquois Piatt	DeWitt Jasper Shelby
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Springfield Region (FOS 5) Manager 217/557-8761

Adams Jersey Morgan	Brown Logan Pike	Calhoun Macoupin Sangamon	Cass Mason Schuyler	Christian Menard Scott	Green Montgomery
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Collinsville Region (FOS 6) Manager 618/346-5120

Bond Randolph	Clinton St. Clair	Fayette Washington	Madison	Marion	Monroe
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Marion Region (FOS 7) Manager 618/993-7200

Alexander Hardin Perry Wabash	Clay Jackson Pope Wayne	Edwards Jefferson Pulaski White	Franklin Johnson Richland Williamson	Gallatin Lawrence Saline	Hamilton Massac Union
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Standard Conditions

Definitions

Act means the Illinois Environmental Protection Act, 415 ILCS 5 as Amended.

Agency means the Illinois Environmental Protection Agency.

Board means the Illinois Pollution Control Board.

Clean Water Act (formerly referred to as the Federal Water Pollution Control Act) means Pub. L 92-500, as amended. 33 U.S.C. 1251 et seq.

NPDES (National Pollutant Discharge Elimination System) means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 402, 318 and 405 of the Clean Water Act.

USEPA means the United States Environmental Protection Agency.

Daily Discharge means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurements, the "daily discharge" is calculated as the average measurement of the pollutant over the day.

Maximum Daily Discharge Limitation (daily maximum) means the highest allowable daily discharge.

Average Monthly Discharge Limitation (30 day average) means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Average Weekly Discharge Limitation (7 day average) means the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

Best Management Practices (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Aliquot means a sample of specified volume used to make up a total composite sample.

Grab Sample means an individual sample of at least 100 milliliters collected at a randomly-selected time over a period not exceeding 15 minutes.

24-Hour Composite Sample means a combination of at least 8 sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over a 24-hour period.

Flow Proportional Composite Sample means a combination of at least 3 sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over an 8-hour period.

Flow Proportional Composite Sample means a combination of sample aliquots of at least 100 milliliters collected at periodic intervals such that either the time interval between each aliquot or the volume of each aliquot is proportional to either the stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot.

- (1) **Duty to comply.** The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or for denial of a permit renewal application. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirements.
- (2) **Duty to reapply.** If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. If the permittee submits a proper application as required by the Agency no later than 180 days prior to the expiration date, this permit shall continue in full force and effect until the final Agency decision on the application has been made.
- (3) **Need to halt or reduce activity not a defense.** It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (4) **Duty to mitigate.** The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
- (5) **Proper operation and maintenance.** The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up, or auxiliary facilities, or similar systems only when necessary to achieve compliance with the conditions of the permit.
- (6) **Permit actions.** This permit may be modified, revoked and reissued, or terminated for cause by the Agency pursuant to 40 CFR 122.62 and 40 CFR 122.63. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- (7) **Property rights.** This permit does not convey any property rights of any sort, or any exclusive privilege.
- (8) **Duty to provide information.** The permittee shall furnish to the Agency within a reasonable time, any information which the Agency may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with the permit. The permittee shall also furnish to the Agency upon request, copies of records required to be kept by this permit.

(9) **Inspection and entry.** The permittee shall allow an authorized representative of the Agency or USEPA (including an authorized contractor acting as a representative of the Agency or USEPA), upon the presentation of credentials and other documents as may be required by law, to:

- (a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- (d) Sample or monitor at reasonable times, for the purpose of assuring permit compliance, or as otherwise authorized by the Act, any substances or parameters at any location.

(10) **Monitoring and records.**

- (a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
- (b) The permittee shall retain records of all monitoring information, including all calibration and maintenance records, and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of this permit, measurement, report or application. Records related to the permittee's sewage sludge use and disposal activities shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503). This period may be extended by request of the Agency or USEPA at any time.
- (c) Records of monitoring information shall include:
 - (1) The date, exact place, and time of sampling or measurements;
 - (2) The individual(s) who performed the sampling or measurements;
 - (3) The date(s) analyses were performed;
 - (4) The individual(s) who performed the analyses;
 - (5) The analytical techniques or methods used; and
 - (6) The results of such analyses.
- (d) Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit. Where no test procedure under 40 CFR Part 136 has been approved, the permittee must submit to the Agency a test method for approval. The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals to ensure accuracy of measurements.

(11) **Signatory requirement.** All applications, reports or information submitted to the Agency shall be signed and certified.

(a) **Application.** All permit applications shall be signed as follows:

- (1) For a corporation: by a principal executive officer of at least the level of vice president or a person or position having overall responsibility for environmental matters for the corporation;
- (2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
- (3) For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official.

(b) **Reports.** All reports required by permits, or other information requested by the Agency shall be signed by a person described in paragraph (a) or by a duly authorized representative of that person. A person is a duly authorized representative only if:

(1) The authorization is made in writing by a person described in paragraph (a); and

(2) The authorization specifies either an individual or a position responsible for the overall operation of the facility, from which the discharge originates, such as a plant manager, superintendent or person of equivalent responsibility; and

(3) The written authorization is submitted to the Agency.

(c) **Changes of Authorization.** If an authorization under (b) is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of (b) must be submitted to the Agency prior to or together with any reports, information, or applications to be signed by an authorized representative.

(d) **Certification.** Any person signing a document under paragraph (a) or (b) of this section shall make the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

(12) **Reporting requirements.**

(a) **Planned changes.** The permittee shall give notice to the Agency as soon as possible of any planned physical alterations or additions to the permitted facility.

Notice is required when:

(1) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source pursuant to 40 CFR 122.29 (b); or

(2) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements pursuant to 40 CFR 122.42 (a)(1).

(3) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

(b) **Anticipated noncompliance.** The permittee shall give advance notice to the Agency of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

(c) **Transfers.** This permit is not transferable to any person except after notice to the Agency.

(d) **Compliance schedules.** Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

(e) **Monitoring reports.** Monitoring results shall be reported at the intervals specified elsewhere in this permit.

(1) Monitoring results must be reported on a Discharge Monitoring Report (DMR).

frequently than required by the permit, using test procedures approved under 40 CFR 136 or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.

- (3) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Agency in the permit.

(f) **Twenty-four hour reporting.** The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24-hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and time; and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. The following shall be included as information which must be reported within 24-hours:

- (1) Any unanticipated bypass which exceeds any effluent limitation in the permit.
- (2) Any upset which exceeds any effluent limitation in the permit.
- (3) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Agency in the permit or any pollutant which may endanger health or the environment.

The Agency may waive the written report on a case-by-case basis if the oral report has been received within 24-hours.

(g) **Other noncompliance.** The permittee shall report all instances of noncompliance not reported under paragraphs (12) (d), (e), or (f), at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (12) (f).

(h) **Other information.** Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application, or in any report to the Agency, it shall promptly submit such facts or information.

(13) **Bypass.**

(a) Definitions.

- (1) Bypass means the intentional diversion of waste streams from any portion of a treatment facility.
- (2) Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

(b) Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs (13)(c) and (13)(d).

(c) Notice.

- (1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.
- (2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in paragraph (12)(f) (24-hour notice).

(c) **Formation of bypass.**

(1) Bypass is prohibited, and the Agency may take enforcement action against a permittee for bypass, unless:

- (i) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
- (ii) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
- (iii) The permittee submitted notices as required under paragraph (13)(c).

(2) The Agency may approve an anticipated bypass, after considering its adverse effects, if the Agency determines that it will meet the three conditions listed above in paragraph (13)(d)(1).

(14) **Upset.**

(a) Definition. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

(b) Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph (14)(c) are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

(c) Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

- (1) An upset occurred and that the permittee can identify the cause(s) of the upset;
- (2) The permitted facility was at the time being properly operated; and
- (3) The permittee submitted notice of the upset as required in paragraph (12)(f)(2) (24-hour notice).
- (4) The permittee complied with any remedial measures required under paragraph (4).

(d) Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

(15) **Transfer of permits.** Permits may be transferred by modification or automatic transfer as described below:

(a) Transfers by modification. Except as provided in paragraph (b), a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued pursuant to 40 CFR 122.62 (b) (2), or a minor modification made pursuant to 40 CFR 122.63 (d), to identify the new permittee and incorporate such other requirements as may be necessary under the Clean Water Act.

(b) Automatic transfers. As an alternative to transfers under paragraph (a), any NPDES permit may be automatically transferred to a new permittee if:

- (1) The current permittee notifies the Agency at least 30 days in advance of the proposed transfer date;
 - (2) The notice includes a written agreement between the existing and new permittees containing a specified date for transfer of permit responsibility, coverage and liability between the existing and new permittees; and
 - (3) The Agency does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement.
- (16) All manufacturing, commercial, mining, and silvicultural dischargers must notify the Agency as soon as they know or have reason to believe:
 - (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant identified under Section 307 of the Clean Water Act which is not limited in the permit, if that discharge will exceed the highest of the following notification levels:
 - (1) One hundred micrograms per liter (100 ug/l);
 - (2) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6 dinitrophenol; and one milligram per liter (1 mg/l) for antimony.
 - (3) Five (5) times the maximum concentration value reported for that pollutant in the NPDES permit application; or
 - (4) The level established by the Agency in this permit.
 - (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the NPDES permit application.
 - (17) All Publicly Owned Treatment Works (POTWs) must provide adequate notice to the Agency of the following:
 - (a) Any new introduction of pollutants into that POTW from an indirect discharge which would be subject to Sections 301 or 306 of the Clean Water Act if it were directly discharging those pollutants; and
 - (b) Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
 - (c) For purposes of this paragraph, adequate notice shall include information on (i) the quality and quantity of effluent introduced into the POTW, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.
 - (18) If the permit is issued to a publicly owned or publicly regulated treatment works, the permittee shall require any industrial user of such treatment works to comply with federal requirements concerning:
 - (a) User charges pursuant to Section 204 (b) of the Clean Water Act, and applicable regulations appearing in 40 CFR 35;
 - (b) Toxic pollutant effluent standards and pretreatment standards pursuant to Section 307 of the Clean Water Act; and
 - (c) Inspection, monitoring and entry pursuant to Section 308 of the Clean Water Act.
 - (19) If an applicable standard or limitation is promulgated under Section 301(b)(2)(C) and (D), 304(b)(2), or 307(a)(2) and that effluent standard or limitation is more stringent than any effluent limitation in the permit, or controls a pollutant not limited in the permit, the permit shall be promptly modified or revoked, and reissued to conform to that effluent standard or limitation.
- (20) Any authorization to construct issued to the permittee pursuant to 35 Ill. Adm. Code 309.154 is hereby incorporated by reference as a condition of this permit.
 - (21) The permittee shall not make any false statement, representation or certification in any application, record, report, plan or other document submitted to the Agency or the USEPA, or required to be maintained under this permit.
 - (22) The Clean Water Act provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Clean Water Act is subject to a civil penalty not to exceed \$25,000 per day of such violation. Any person who willfully or negligently violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318 or 405 of the Clean Water Act is subject to a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than one year, or both. Additional penalties for violating these sections of the Clean Water Act are identified in 40 CFR 122.41 (a)(2) and (3).
 - (23) The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both.
 - (24) The Clean Water Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.
 - (25) Collected screening, slurries, sludges, and other solids shall be disposed of in such a manner as to prevent entry of those wastes (or runoff from the wastes) into waters of the State. The proper authorization for such disposal shall be obtained from the Agency and is incorporated as part hereof by reference.
 - (26) In case of conflict between these standard conditions and any other condition(s) included in this permit, the other condition(s) shall govern.
 - (27) The permittee shall comply with, in addition to the requirements of the permit, all applicable provisions of 35 Ill. Adm. Code, Subtitle C, Subtitle D, Subtitle E, and all applicable orders of the Board or any court with jurisdiction.
 - (28) The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit is held invalid, the remaining provisions of this permit shall continue in full force and effect.
- (Rev. 7-9-2010 bah)

Appendix D

NOI and Acknowledgement Letter from EPA/State



Illinois Environmental Protection Agency

1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276 • (217) 782-3397

Division of Water Pollution Control Notice of Intent (NOI) for General Permit to Discharge Storm Water Associated with Construction Site Activities

This fillable form may be completed online, a copy saved locally, printed and signed before it is submitted to the Permit Section at the above address.

For Office Use Only

OWNER INFORMATION

Permit No. ILR10 _____

Company/Owner Name: _____
Mailing Address: _____ Phone: _____
City: _____ State: _____ Zip: _____ Fax: _____
Contact Person: _____ E-mail: _____
Owner Type (select one) _____

CONTRACTOR INFORMATION

MS4 Community: Yes No

Contractor Name: _____
Mailing Address: _____ Phone: _____
City: _____ State: _____ Zip: _____ Fax: _____

CONSTRUCTION SITE INFORMATION

Select One: New Change of information for: ILR10 _____
Project Name: _____ County: _____
Street Address: _____ City: _____ IL Zip: _____
Latitude: _____ Longitude: _____
(Deg) (Min) (Sec) (Deg) (Min) (Sec) Section Township Range
Approximate Construction Start Date _____ Approximate Construction End Date _____

Total size of construction site in acres: _____
If less than 1 acre, is the site part of a larger common plan of development?
 Yes No

Fee Schedule for Construction Sites:
Less than 5 acres - \$250
5 or more acres - \$750

STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

Has the SWPPP been submitted to the Agency? Yes No
(Submit SWPPP electronically to: epa.constilr10swppp@illinois.gov)

Location of SWPPP for viewing: Address: _____ City: _____

SWPPP contact information: _____ Inspector qualifications: _____
Contact Name: _____
Phone: _____ Fax: _____ E-mail: _____

Project inspector, if different from above _____ Inspector qualifications: _____
Inspector's Name: _____
Phone: _____ Fax: _____ E-mail: _____

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed \$50,000 for the violation and an additional civil penalty of not to exceed \$10,000 for each day during which the violation continues (415 ILCS 5/42) and may also prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

TYPE OF CONSTRUCTION (select one)

Construction Type

SIC Code:

Type a detailed description of the project:

HISTORIC PRESERVATION AND ENDANGERED SPECIES COMPLIANCE

Has the project been submitted to the following state agencies to satisfy applicable requirements for compliance with Illinois law on:

Historic Preservation Agency Yes No <https://www2.illinois.gov/dnrhistoric/Preserve/Pages/Resource-Protection.aspx>

Endangered Species Yes No <http://dnr.illinois.gov/ecopublic/>

RECEIVING WATER INFORMATION

Does your storm water discharge directly to: Waters of the State or Storm Sewer

Owner of storm sewer system:

Name of closest receiving water body to which you discharge:

Mail completed form to: Illinois Environmental Protection Agency
Division of Water Pollution Control
Attn: Permit Section
Post Office Box 19276
Springfield, Illinois 62794-9276
or call (217) 782-0610
FAX: (217) 782-9891

Or submit electronically to: epa.constilr10swppp@illinois.gov

I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage this system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. In addition, I certify that the provisions of the permit, including the development and implementation of a storm water pollution prevention plan and a monitoring program plan, will be complied with.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

Owner Signature: _____

Date: _____

Printed Name: _____

Title: _____

INSTRUCTIONS FOR COMPLETION OF CONSTRUCTION ACTIVITY NOTICE OF INTENT (NOI) FORM

Submit original, electronic or facsimile copies. Facsimile and/or electronic copies should be followed-up with submission of an original signature copy as soon as possible. Please write "copy" under the "For Office Use Only" box in the upper right hand corner of the first page.

This fillable form may be completed online, a copy saved locally, printed and signed before it is submitted to the Permit Section at:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Permit Section
Post Office Box 19276
Springfield, Illinois 62794-9276
or call (217) 782-0610

FAX: (217) 782-9891

Or submit electronically to: epa.constilr10swppp@illinois.gov

Reports must be typed or printed legibly and signed.

Any facility that is not presently covered by the General NPDES Permit for Storm Water Discharges From Construction Site Activities is considered a new facility.

If this is a change in your facility information, renewal, etc., please fill in your permit number on the appropriate line, changes of information or permit renewal notifications do not require a fee.

NOTE: FACILITY LOCATION IS NOT NECESSARILY THE FACILITY MAILING ADDRESS, BUT SHOULD DESCRIBE WHERE THE FACILITY IS LOCATED.

Use the formats given in the following examples for correct form completion.

	Example	Format
Section	12	1 or 2 numerical digits
Township	12N	1 or 2 numerical digits followed by "N" or "S"
Range	12W	1 or 2 numerical digits followed by "E" or "W"

For the Name of Closest Receiving Waters, do not use terms such as ditch or channel. For unnamed tributaries, use terms which include at least a named main tributary such as "Unnamed Tributary to Sugar Creek to Sangamon River."

Submission of initial fee and an electronic submission of Storm Water Pollution Prevention Plan (SWPPP) for Initial Permit prior to the Notice of Intent being considered complete for coverage by the ILR10 General Permits. Please make checks payable to: Illinois EPA at the above address.

Construction sites with less than 5 acres of land disturbance - fee is \$250.

Construction sites with 5 or more acres of land disturbance - fee is \$750.

SWPPP should be submitted electronically to: epa.constilr10swppp@illinois.gov. When submitting electronically, use Project Name and City as indicated on NOI form.

Appendix E
Inspection Report Template

Appendix E - Stormwater Construction Site Inspection Report

General Information			
Project Name			
NPDES Tracking No.		Location	
Date of Inspection		Start/End Time	
Inspector's Name(s)			
Inspector's Title(s)			
Inspector's Contact Information			
Inspector's Qualifications			
Describe present phase of construction			
Type of Inspection: <input type="checkbox"/> Regular <input type="checkbox"/> Pre-storm event <input type="checkbox"/> During storm event <input type="checkbox"/> Post-storm event			
Weather Information			
Has there been a storm event since the last inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, provide: Storm Start Date & Time: Storm Duration (hrs): Approximate Amount of Precipitation (in):			
Weather at time of this inspection? <input type="checkbox"/> Clear <input type="checkbox"/> Cloudy <input type="checkbox"/> Rain <input type="checkbox"/> Sleet <input type="checkbox"/> Fog <input type="checkbox"/> Snowing <input type="checkbox"/> High Winds <input type="checkbox"/> Other: Temperature:			
Have any discharges occurred since the last inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe:			
Are there any discharges at the time of inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe:			

Site-specific BMPs

- *Number the structural and non-structural BMPs identified in your SWPPP on your site map and list them below (add as many BMPs as necessary). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required BMPs at your site.*
- *Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.*

	BMP	BMP Installed?	BMP Maintenance Required?	Corrective Action Needed and Notes
1		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
4		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
5		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
6		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
7		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
8		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
9		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
10		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
11		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	

	BMP	BMP Installed?	BMP Maintenance Required?	Corrective Action Needed and Notes
12		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
13		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
14		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
15		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
16		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
17		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
18		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
19		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
20		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	

Overall Site Issues

Below are some general site issues that should be assessed during inspections. Customize this list as needed for conditions at your site.

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
1	Are all slopes and disturbed areas not actively being worked properly stabilized?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2	Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) protected with barriers or similar BMPs?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3	Are perimeter controls and sediment barriers adequately installed (keyed into substrate) and maintained?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
4	Are discharge points and receiving waters free of any sediment deposits?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
5	Are storm drain inlets properly protected?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
6	Is the construction exit preventing sediment from being tracked into the street?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
7	Is trash/litter from work areas collected and placed in covered dumpsters?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
8	Are washout facilities (e.g. concrete) available, clearly marked, and maintained?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
9	Are vehicle and equipment staging and maintenance areas free of spills, leaks, or any other deleterious material?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
10	Are materials that are potential stormwater contaminants stored inside or under cover?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
11	Are non-stormwater discharges (e.g., wash water, dewatering) properly controlled?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
12	(Other)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	

Non-Compliance

Describe any incidents of non-compliance not described above:

CERTIFICATION STATEMENT

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

Print name and title: _____

Signature: _____ **Date:** _____

Appendix F
Corrective Action Log

Inspection Date	Inspector Name(s)	Description of BMP Deficiency	Corrective Action Needed (including planned date/responsible person)	Date Action Taken/Responsible person

Appendix G
SWPPP Amendment Log

Amendment No.	Description of the Amendment	Date of Amendment	Amendment Prepared by [Name(s) and Title]

Appendix H
Subcontractor Certifications/Agreements

Appendix H – Subcontractor Certifications/Agreements

SUBCONTRACTOR CERTIFICATION STORMWATER POLLUTION PREVENTION PLAN

Project Number: _____

Project Title: _____

Operator(s): _____

As a subcontractor, you are required to comply with the Stormwater Pollution Prevention Plan (SWPPP) for any work that you perform on-site. Any person or group who violates any condition of the SWPPP may be subject to substantial penalties or loss of contract. You are encouraged to advise each of your employees working on this project of the requirements of the SWPPP. A copy of the SWPPP is available for your review at the office trailer.

Each subcontractor engaged in activities at the construction site that could impact stormwater must be identified and sign the following certification statement:

I certify under the penalty of law that I have read and understand the terms and conditions of the SWPPP for the above designated project and agree to follow the BMPs and practices described in the SWPPP.

This certification is hereby signed in reference to the above-named project:

Company: _____

Address: _____

Telephone Number: _____

Type of construction service to be provided: _____

Signature: _____

Title: _____

Date: _____

Appendix I
Grading and Stabilization Activities Log

Date Grading Activity Initiated	Description of Grading Activity	Date Grading Activity Ceased (Indicate Temporary or Permanent)	Date When Stabilization Measures are Initiated	Description of Stabilization Measure and Location

Appendix J
Training Log

Appendix J –SWPPP Training Log

Stormwater Pollution Prevention Training Log

Project Name: _____

Project Location: _____

Instructor's Name(s): _____

Instructor's Title(s): _____

Course Location: _____ Date: _____

Course Length (hours): _____

Stormwater Training Topic: *(check as appropriate)*

- Erosion Control BMPs
- Emergency Procedures
- Sediment Control BMPs
- Good Housekeeping BMPs
- Non-Stormwater BMPs

Specific Training Objective: _____

Attendee Roster: *(attach additional pages as necessary)*

No.	Name of Attendee	Company
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Appendix K
Delegation of Authority

Appendix K – Delegation of Authority Form

Delegation of Authority

I, _____ (name), hereby designate the person or specifically described position below to be a duly authorized representative for the purpose of overseeing compliance with environmental requirements, including the Construction General Permit, at the _____ construction site. The designee is authorized to sign any reports, stormwater pollution prevention plans and all other documents required by the permit.

_____ (name of person or position)
_____ (company)
_____ (address)
_____ (city, state, zip)
_____ (phone)

By signing this authorization, I confirm that I meet the requirements to make such a designation as set forth in _____ (Reference State Permit), and that the designee above meets the definition of a “duly authorized representative” as set forth in _____ (Reference State Permit).

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: _____

Company: _____

Title: _____

Signature: _____

Date: _____

Appendix L

SHPO Approval Letter

EcoCAT Screening and IDNR Approval Letter

NRCS Web Soil Survey



Illinois
Department of
**Natural
Resources**

JB Pritzker, Governor • Natalie Phelps Finnie, Director
One Natural Resources Way • Springfield, Illinois 62702-1271

www.dnr.illinois.gov

Peoria County
Peoria
West Deerbrook Drive
Section:29-Township:10N-Range:8E
IEPA
Roadway Reconstruction

PLEASE REFER TO: SHPO LOG #057010324

January 31, 2024

Nora Schmidt
AKRF
530 Walnut St., Suite 998
Philadelphia, PA 19106

The Illinois State Historic Preservation Office is required by the Illinois State Agency Historic Resources Preservation Act (20 ILCS 3420, as amended, 17 IAC 4180) to review all state funded, permitted, or licensed undertakings for their effect on cultural resources. Pursuant to this, we have received information regarding the referenced project for our comment.

Our staff has reviewed the specifications under the state law and assessed the impact of the project as submitted by your office. We have determined, based on the available information, that no significant historic, architectural, or archaeological resources are located within the proposed project area.

According to the information you have provided there is no federal involvement in your project. Be aware that the state law is less restrictive than the federal cultural resource laws concerning archaeology. If your project will use federal loans or grants, need federal agency permits, use federal property, or involve assistance from a federal agency then your project must be reviewed under the National Historic Preservation Act of 1966, as amended. Please notify us immediately if such is the case.

This clearance remains in effect for two (2) years from date of issuance. It does not pertain to any discovery during construction, nor is it a clearance for purposes of the Illinois Human Remains Protection Act (20 ILCS 3440).

Please retain this letter in your files as evidence of compliance with the Illinois State Agency Historic Resources Preservation Act.

If further assistance is needed please contact Jeff Kruchten, Principal Archaeologist, at 217/785-1279 or jeff.kruchten@illinois.gov.

Sincerely,

Carey L. Mayer, AIA
Deputy State Historic
Preservation Officer

Applicant: AKRF, Inc.
Contact: Kevin Flynn
Address: 530 Walnut Street
Suite #998
Philadelphia, PA 19106

IDNR Project Number: 2317316
Date: 06/22/2023
Alternate Number: N/a, N/a

Project: West Deerbrook Drive Greenstreet, Roadway and Stormwater Improvements
Address: West Deerbrook Drive, Peoria

Description: The scope of work is summarized to involve engineering and surveying services to develop improvement options and recommendations to reconstruct Deerbrook Drive in a manner that minimizes runoff generated by the public roadway. The project consists of stormwater improvements on West Deerbrook Drive from the intersection of Knoxville Avenue to the Deerbrook Drive cul-de-sac, a length of approximately 3,000 linear feet. Improvements will consist of permeable pavement, subsurface storage for stormwater infiltration and detention, and other green infrastructure systems such as right-of-way bioretention systems. All proposed and implemented stormwater improvements will be limited to the city right-of-way.

Natural Resource Review Results

Consultation for Endangered Species Protection and Natural Areas Preservation (Part 1075)

The Illinois Natural Heritage Database shows the following protected resources may be in the vicinity of the project location:

Mossville Road Hill Prairie INAI Site
Robinson Park Hill Prairie INAI Site
Wokanda Camp INAI Site
Mary Taylor's Mossville Road Hill Prairie Natural Heritage Landmark
Robinson Park Hill Prairies Nature Preserve
Rusty-Patched Bumble-Bee (*Bombus affinis*)

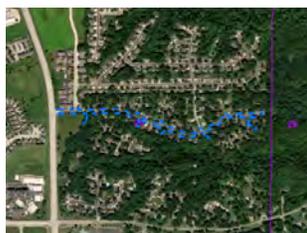
An IDNR staff member will evaluate this information and contact you to request additional information or to terminate consultation if adverse effects are unlikely.

Location

The applicant is responsible for the accuracy of the location submitted for the project.

County: Peoria

Township, Range, Section:
10N, 8E, 29



IL Department of Natural Resources
Contact
Kyle Burkwald
217-785-5500
Division of Ecosystems & Environment

Government Jurisdiction
City of Peoria
Andrea Klopfenstein
3505 N. DRIES LANE
Peoria, Illinois 61604

Disclaimer

The Illinois Natural Heritage Database cannot provide a conclusive statement on the presence, absence, or condition of natural resources in Illinois. This review reflects the information existing in the Database at the time of this inquiry, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, compliance with applicable statutes and regulations is required.

Terms of Use

By using this website, you acknowledge that you have read and agree to these terms. These terms may be revised by IDNR as necessary. If you continue to use the EcoCAT application after we post changes to these terms, it will mean that you accept such changes. If at any time you do not accept the Terms of Use, you may not continue to use the website.

1. The IDNR EcoCAT website was developed so that units of local government, state agencies and the public could request information or begin natural resource consultations on-line for the Illinois Endangered Species Protection Act, Illinois Natural Areas Preservation Act, and Illinois Interagency Wetland Policy Act. EcoCAT uses databases, Geographic Information System mapping, and a set of programmed decision rules to determine if proposed actions are in the vicinity of protected natural resources. By indicating your agreement to the Terms of Use for this application, you warrant that you will not use this web site for any other purpose.
2. Unauthorized attempts to upload, download, or change information on this website are strictly prohibited and may be punishable under the Computer Fraud and Abuse Act of 1986 and/or the National Information Infrastructure Protection Act.
3. IDNR reserves the right to enhance, modify, alter, or suspend the website at any time without notice, or to terminate or restrict access.

Security

EcoCAT operates on a state of Illinois computer system. We may use software to monitor traffic and to identify unauthorized attempts to upload, download, or change information, to cause harm or otherwise to damage this site. Unauthorized attempts to upload, download, or change information on this server is strictly prohibited by law.

Unauthorized use, tampering with or modification of this system, including supporting hardware or software, may subject the violator to criminal and civil penalties. In the event of unauthorized intrusion, all relevant information regarding possible violation of law may be provided to law enforcement officials.

Privacy

EcoCAT generates a public record subject to disclosure under the Freedom of Information Act. Otherwise, IDNR uses the information submitted to EcoCAT solely for internal tracking purposes.



EcoCAT Receipt	Project Code 2317316
-----------------------	-----------------------------

APPLICANT	DATE
------------------	-------------

AKRF, Inc.
Kevin Flynn
530 Walnut Street
Suite #998
Philadelphia, PA 19106

6/22/2023

DESCRIPTION	FEE	CONVENIENCE FEE	TOTAL PAID
--------------------	------------	------------------------	-------------------

EcoCAT Consultation	\$ 125.00	\$ 2.81	\$ 127.81
---------------------	-----------	---------	-----------

TOTAL PAID	\$ 127.81
------------	-----------

Illinois Department of Natural Resources
One Natural Resources Way
Springfield, IL 62702
217-785-5500
dnr.ecocat@illinois.gov



Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271
<http://dnr.state.il.us>

JB Pritzker, Governor

Natalie Phelps Finnie, Director

June 26, 2023

Kevin Flynn
AKRF, Inc.
530 Walnut Street
Suite #998
Philadelphia, PA 19106

RE: West Deerbrook Drive Greenstreet, Roadway and Stormwater Improvements
Project Number(s): 2317316 [N/a, N/a]
County: Peoria

Dear Applicant:

This letter is in reference to the project you recently submitted for consultation. The natural resource review provided by EcoCAT identified protected resources that may be in the vicinity of the proposed action. The Department has evaluated this information and concluded that adverse effects are unlikely. Therefore, consultation under 17 Ill. Adm. Code Part 1075 is terminated.

This consultation is valid for two years unless new information becomes available that was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the project has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary.

The natural resource review reflects the information existing in the Illinois Natural Heritage Database at the time of the project submittal, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, you must comply with the applicable statutes and regulations. Also, note that termination does not imply IDNR's authorization or endorsement of the proposed action.

Please contact me if you have questions regarding this review.

Kyle Burkwald

Kyle Burkwald
Division of Ecosystems and Environment
217-785-5500



United States
Department of
Agriculture

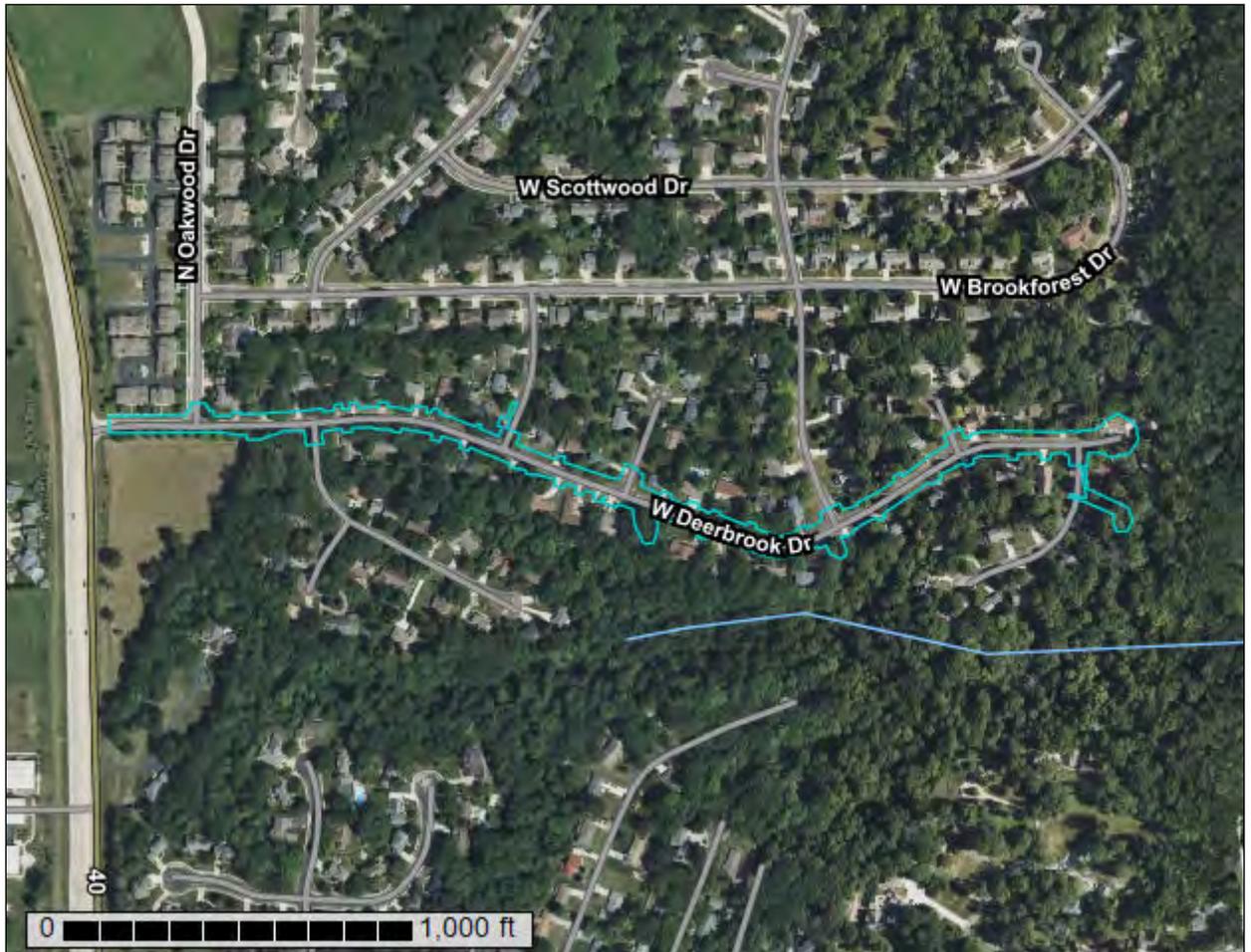
NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for **Peoria County, Illinois**

W. Deerbrook Drive



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

Preface	2
How Soil Surveys Are Made	5
Soil Map	8
Soil Map.....	9
Legend.....	10
Map Unit Legend.....	11
Map Unit Descriptions.....	11
Peoria County, Illinois.....	13
17A—Keomah silt loam, 0 to 2 percent slopes.....	13
279B—Rozetta silt loam, 2 to 5 percent slopes.....	14
Soil Information for All Uses	17
Soil Properties and Qualities.....	17
Soil Erosion Factors.....	17
K Factor, Whole Soil.....	17
K Factor, Rock Free.....	20
Soil Physical Properties.....	23
Available Water Capacity.....	23
Available Water Storage.....	26
Liquid Limit.....	30
Organic Matter.....	33
Percent Clay.....	36
Percent Sand.....	39
Percent Silt.....	42
Plasticity Index.....	45
Saturated Hydraulic Conductivity (Ksat).....	49
Saturated Hydraulic Conductivity (Ksat), Standard Classes.....	52
Soil Qualities and Features.....	56
AASHTO Group Classification (Surface).....	56
Depth to Bedrock.....	60
Hydrologic Soil Group.....	64
Water Features.....	68
Depth to Water Table.....	68
Ecological Sites.....	73
All Ecological Sites —	73
Map—Dominant Ecological Site.....	74
Legend—Dominant Ecological Site.....	75
Table—Ecological Sites by Map Unit Component.....	76
Soil Reports.....	77
AOI Inventory.....	77
Component Legend.....	77
References	78

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

Custom Soil Resource Report

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

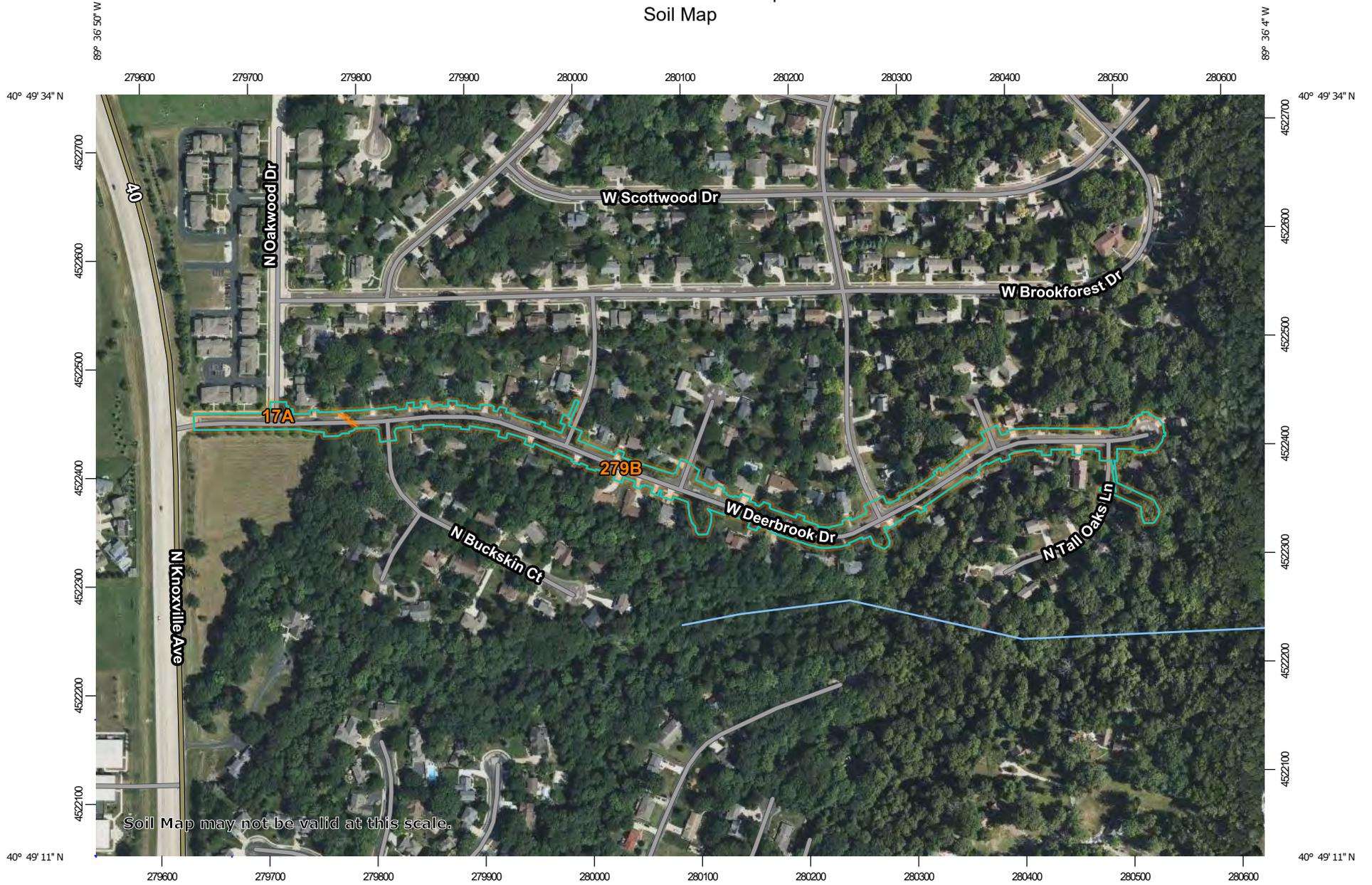
Custom Soil Resource Report

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map



Map Scale: 1:4,940 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot

 Sinkhole

 Slide or Slip

 Sodic Spot

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Peoria County, Illinois
 Survey Area Data: Version 18, Aug 28, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 14, 2020—Aug 20, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
17A	Keomah silt loam, 0 to 2 percent slopes	0.6	11.9%
279B	Rozetta silt loam, 2 to 5 percent slopes	4.7	88.1%
Totals for Area of Interest		5.3	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

Custom Soil Resource Report

onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Peoria County, Illinois

17A—Keomah silt loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2tjnn
Elevation: 590 to 750 feet
Mean annual precipitation: 36 to 40 inches
Mean annual air temperature: 51 to 56 degrees F
Frost-free period: 165 to 190 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Keomah and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Keomah

Setting

Landform: Ground moraines
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loess

Typical profile

Ap - 0 to 6 inches: silt loam
E - 6 to 13 inches: silt loam
Bt - 13 to 28 inches: silty clay loam
Btg - 28 to 48 inches: silty clay loam
Cg - 48 to 60 inches: silt loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 6 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 28 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 11.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C/D
Ecological site: F115XC005IL - Loess Upland Forest
Hydric soil rating: No

Minor Components

Rozetta

Percent of map unit: 5 percent
Landform: Ground moraines
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Convex
Ecological site: F115XC005IL - Loess Upland Forest
Hydric soil rating: No

Denny

Percent of map unit: 2 percent
Landform: Depressions
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: R108XB009IL - Poned Loess Sedge Meadow
Hydric soil rating: Yes

Rushville

Percent of map unit: 2 percent
Landform: Depressions
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: F115XC006IL - Loess Upland Flatwoods
Hydric soil rating: Yes

Sable

Percent of map unit: 1 percent
Landform: Swales
Landform position (three-dimensional): Dip
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R108XB009IL - Poned Loess Sedge Meadow
Hydric soil rating: Yes

279B—Rozetta silt loam, 2 to 5 percent slopes

Map Unit Setting

National map unit symbol: 2tjp3
Elevation: 480 to 1,070 feet
Mean annual precipitation: 35 to 40 inches
Mean annual air temperature: 48 to 55 degrees F
Frost-free period: 150 to 190 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Rozetta and similar soils: 90 percent

Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Rozetta

Setting

Landform: Ground moraines

Landform position (two-dimensional): Summit, shoulder, backslope

Landform position (three-dimensional): Interfluve, head slope, side slope

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Loess

Typical profile

Ap - 0 to 7 inches: silt loam

E - 7 to 11 inches: silt loam

Bt1 - 11 to 45 inches: silty clay loam

Bt2 - 45 to 55 inches: silt loam

C - 55 to 60 inches: silt loam

Properties and qualities

Slope: 2 to 5 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

*Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.60 to 2.00 in/hr)*

Depth to water table: About 48 to 72 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water supply, 0 to 60 inches: Very high (about 12.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: B

Ecological site: F095XB010WI - Loamy and Clayey Upland

Hydric soil rating: No

Minor Components

Keomah

Percent of map unit: 3 percent

Landform: Ground moraines

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Interfluve

Down-slope shape: Linear

Across-slope shape: Linear

Ecological site: F115XC005IL - Loess Upland Forest

Hydric soil rating: No

Clarksdale

Percent of map unit: 3 percent

Custom Soil Resource Report

Landform: Ground moraines
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R115XC004IL - Loess Upland Savanna
Hydric soil rating: No

Stronghurst

Percent of map unit: 2 percent
Landform: Ground moraines
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Concave
Across-slope shape: Linear
Ecological site: F095XB005WI - Moist Loamy or Clayey Lowland
Hydric soil rating: No

Sable

Percent of map unit: 2 percent
Landform: Swales
Landform position (three-dimensional): Dip
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R108XB008IL - Wet Loess Upland Prairie
Hydric soil rating: Yes

Soil Information for All Uses

Soil Properties and Qualities

The Soil Properties and Qualities section includes various soil properties and qualities displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each property or quality.

Soil Erosion Factors

Soil Erosion Factors are soil properties and interpretations used in evaluating the soil for potential erosion. Example soil erosion factors can include K factor for the whole soil or on a rock free basis, T factor, wind erodibility group and wind erodibility index.

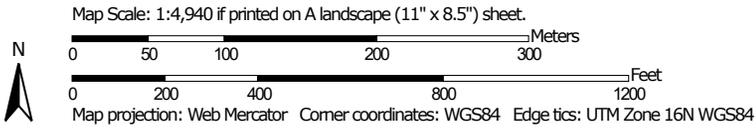
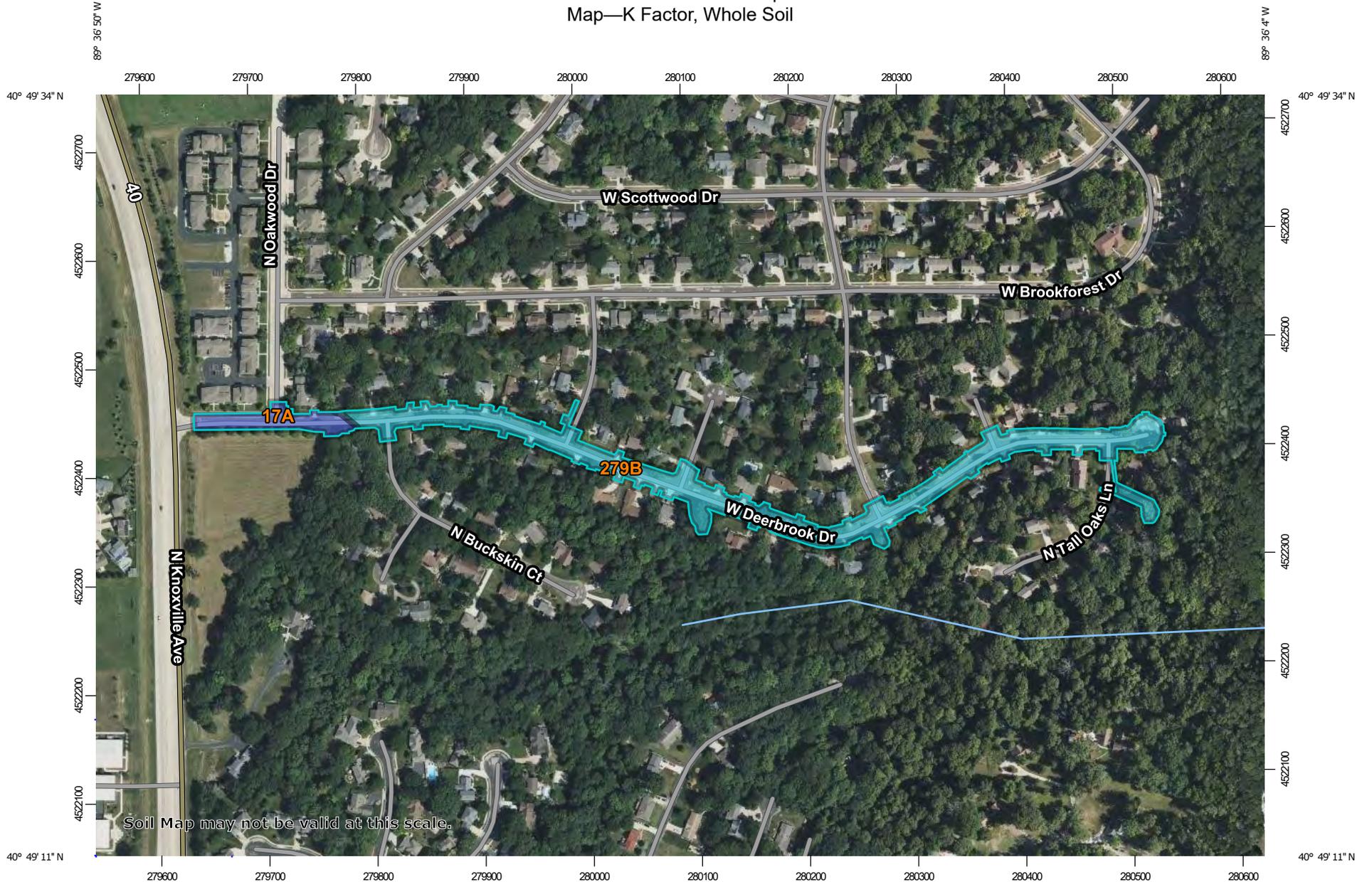
K Factor, Whole Soil

Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and saturated hydraulic conductivity (Ksat). Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

"Erosion factor Kw (whole soil)" indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

Factor K does not apply to organic horizons and is not reported for those layers.

Custom Soil Resource Report Map—K Factor, Whole Soil



Custom Soil Resource Report

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

-  .02
-  .05
-  .10
-  .15
-  .17
-  .20
-  .24
-  .28
-  .32
-  .37
-  .43
-  .49
-  .55
-  .64
-  Not rated or not available

Soil Rating Lines

-  .02
-  .05
-  .10
-  .15
-  .17
-  .20

-  .24
-  .28
-  .32
-  .37
-  .43
-  .49
-  .55
-  .64
-  Not rated or not available

Soil Rating Points

-  .02
-  .05
-  .10
-  .15
-  .17
-  .20
-  .24
-  .28
-  .32
-  .37
-  .43
-  .49
-  .55
-  .64
-  Not rated or not available

Water Features

-  Streams and Canals
- Transportation**
-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads
- Background**
-  Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Peoria County, Illinois
 Survey Area Data: Version 18, Aug 28, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 14, 2020—Aug 20, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Table—K Factor, Whole Soil

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
17A	Keomah silt loam, 0 to 2 percent slopes	.49	0.6	11.9%
279B	Rozetta silt loam, 2 to 5 percent slopes	.37	4.7	88.1%
Totals for Area of Interest			5.3	100.0%

Rating Options—K Factor, Whole Soil

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Layer Options (Horizon Aggregation Method): Surface Layer (Not applicable)

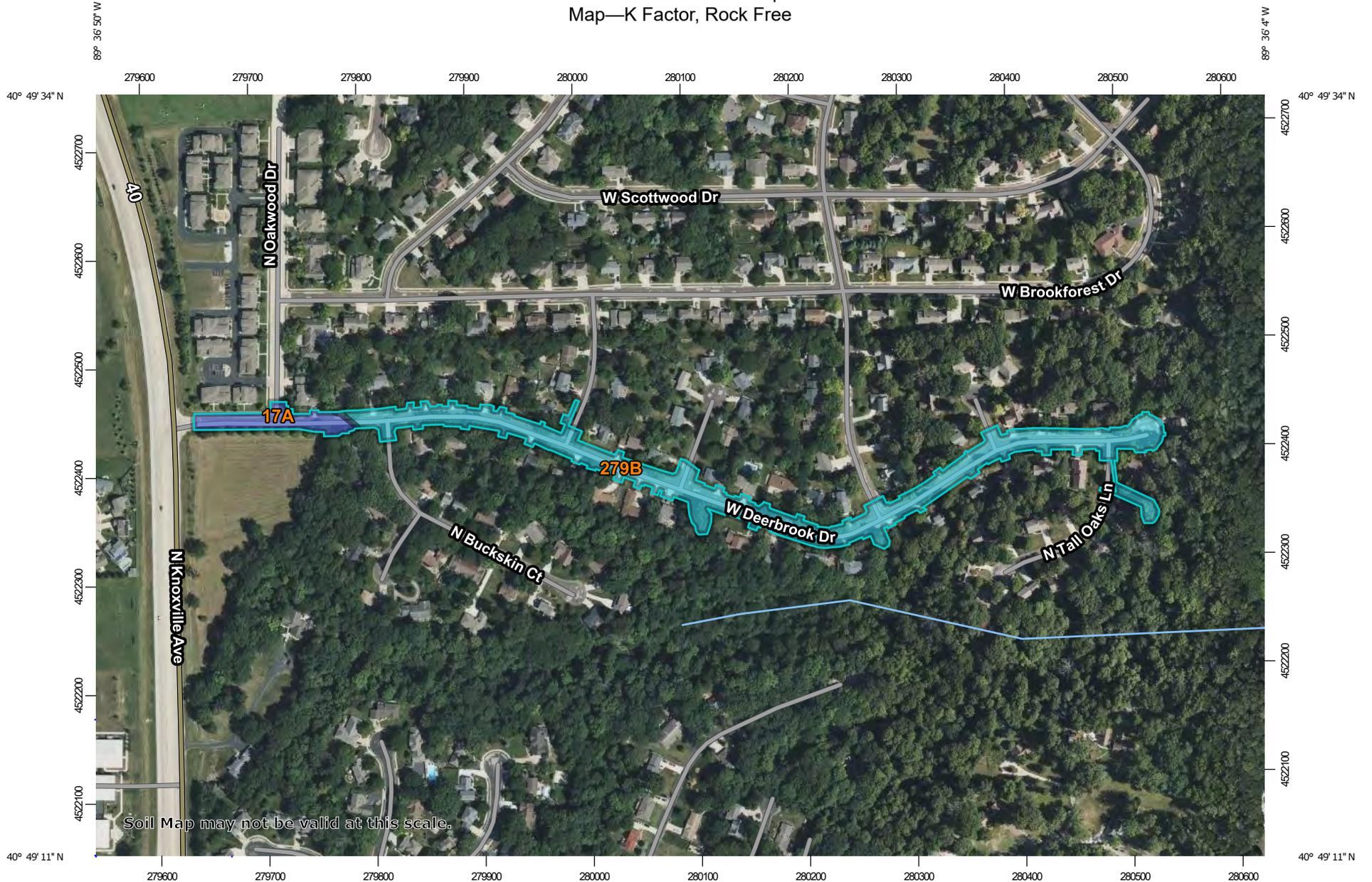
K Factor, Rock Free

Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and saturated hydraulic conductivity (Ksat). Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

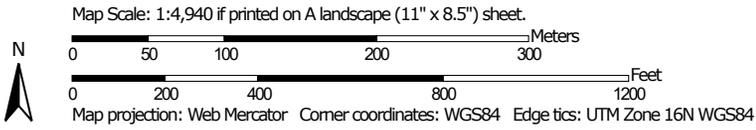
"Erosion factor Kf (rock free)" indicates the erodibility of the fine-earth fraction, or the material less than 2 millimeters in size.

Factor K does not apply to organic horizons and is not reported for those layers.

Custom Soil Resource Report
Map—K Factor, Rock Free



Soil Map may not be valid at this scale.



Custom Soil Resource Report

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

-  .02
-  .05
-  .10
-  .15
-  .17
-  .20
-  .24
-  .28
-  .32
-  .37
-  .43
-  .49
-  .55
-  .64
-  Not rated or not available

Soil Rating Lines

-  .02
-  .05
-  .10
-  .15
-  .17
-  .20

-  .24
-  .28
-  .32
-  .37
-  .43
-  .49
-  .55
-  .64
-  Not rated or not available

Soil Rating Points

-  .02
-  .05
-  .10
-  .15
-  .17
-  .20
-  .24
-  .28
-  .32
-  .37
-  .43
-  .49
-  .55
-  .64
-  Not rated or not available

Water Features

-  Streams and Canals
- Transportation**
-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads
- Background**
-  Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

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Soil Survey Area: Peoria County, Illinois
 Survey Area Data: Version 18, Aug 28, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 14, 2020—Aug 20, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Table—K Factor, Rock Free

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
17A	Keomah silt loam, 0 to 2 percent slopes	.49	0.6	11.9%
279B	Rozetta silt loam, 2 to 5 percent slopes	.37	4.7	88.1%
Totals for Area of Interest			5.3	100.0%

Rating Options—K Factor, Rock Free

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Layer Options (Horizon Aggregation Method): Surface Layer (Not applicable)

Soil Physical Properties

Soil Physical Properties are measured or inferred from direct observations in the field or laboratory. Examples of soil physical properties include percent clay, organic matter, saturated hydraulic conductivity, available water capacity, and bulk density.

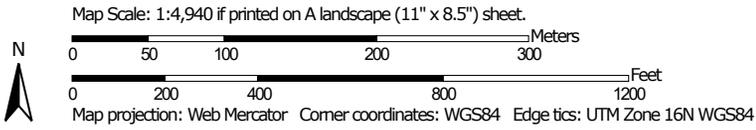
Available Water Capacity

Available water capacity (AWC) refers to the quantity of water that the soil is capable of storing for use by plants. The capacity for water storage is given in centimeters of water per centimeter of soil for each soil layer. The capacity varies, depending on soil properties that affect retention of water. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure, with corrections for salinity and rock fragments. Available water capacity is an important factor in the choice of plants or crops to be grown and in the design and management of irrigation systems. It is not an estimate of the quantity of water actually available to plants at any given time.

Available water supply (AWS) is computed as AWC times the thickness of the soil. For example, if AWC is 0.15 cm/cm, the available water supply for 25 centimeters of soil would be 0.15 x 25, or 3.75 centimeters of water.

For each soil layer, AWC is recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

Custom Soil Resource Report Map—Available Water Capacity



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

-  <= 0.22
-  > 0.22 and <= 0.23
-  Not rated or not available

Soil Rating Lines

-  <= 0.22
-  > 0.22 and <= 0.23
-  Not rated or not available

Soil Rating Points

-  <= 0.22
-  > 0.22 and <= 0.23
-  Not rated or not available

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

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Soil Survey Area: Peoria County, Illinois
 Survey Area Data: Version 18, Aug 28, 2023

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Date(s) aerial images were photographed: Aug 14, 2020—Aug 20, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Table—Available Water Capacity

Map unit symbol	Map unit name	Rating (centimeters per centimeter)	Acres in AOI	Percent of AOI
17A	Keomah silt loam, 0 to 2 percent slopes	0.22	0.6	11.9%
279B	Rozetta silt loam, 2 to 5 percent slopes	0.23	4.7	88.1%
Totals for Area of Interest			5.3	100.0%

Rating Options—Available Water Capacity

Units of Measure: centimeters per centimeter

Aggregation Method: Dominant Component

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Interpret Nulls as Zero: No

Layer Options (Horizon Aggregation Method): Depth Range (Weighted Average)

Top Depth: 0

Bottom Depth: 10

Units of Measure: Centimeters

Available Water Storage

Available water storage (AWS) is the total volume of water (in centimeters) that should be available to plants when the soil, inclusive of rock fragments, is at field capacity. It is commonly estimated as the amount of water held between field capacity and the wilting point, with corrections for salinity, rock fragments, and rooting depth. AWS is reported as a single value (in centimeters) of water for the specified depth of the soil. AWS is calculated as the available water capacity times the thickness of each soil horizon to a specified depth.

For each soil layer, available water capacity, used in the computation of AWS, is recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For the derivation of AWS, only the representative value for available water capacity is used.

The available water storage for each map unit component is computed as described above and then aggregated to a single value for the map unit by the process described below.

Custom Soil Resource Report

A map unit typically consists of one or more "components." A component is either some type of soil or some nonsoil entity, e.g., rock outcrop. For the attribute being aggregated (e.g., available water storage), the first step of the aggregation process is to derive one attribute value for each of a map unit's components. From this set of component attributes, the next step of the process is to derive a single value that represents the map unit as a whole. Once a single value for each map unit is derived, a thematic map for the map units can be generated. Aggregation is needed because map units rather than components are delineated on the soil maps.

The composition of each component in a map unit is recorded as a percentage. A composition of 60 indicates that the component typically makes up approximately 60 percent of the map unit.

For the available water storage, when a weighted average of all component values is computed, percent composition is the weighting factor.

Custom Soil Resource Report Map—Available Water Storage



Soil Map may not be valid at this scale.

Map Scale: 1:4,940 if printed on A landscape (11" x 8.5") sheet.

0 50 100 200 300 Meters

0 200 400 800 1200 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

-  <= 5.23
-  > 5.23 and <= 5.70
-  Not rated or not available

Soil Rating Lines

-  <= 5.23
-  > 5.23 and <= 5.70
-  Not rated or not available

Soil Rating Points

-  <= 5.23
-  > 5.23 and <= 5.70
-  Not rated or not available

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

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Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

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This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Peoria County, Illinois
 Survey Area Data: Version 18, Aug 28, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 14, 2020—Aug 20, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Table—Available Water Storage

Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
17A	Keomah silt loam, 0 to 2 percent slopes	5.23	0.6	11.9%
279B	Rozetta silt loam, 2 to 5 percent slopes	5.70	4.7	88.1%
Totals for Area of Interest			5.3	100.0%

Rating Options—Available Water Storage

Units of Measure: centimeters

Aggregation Method: Weighted Average

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Interpret Nulls as Zero: No

Layer Options (Horizon Aggregation Method): Depth Range (Weighted Sum)

Top Depth: 0

Bottom Depth: 10

Units of Measure: Inches

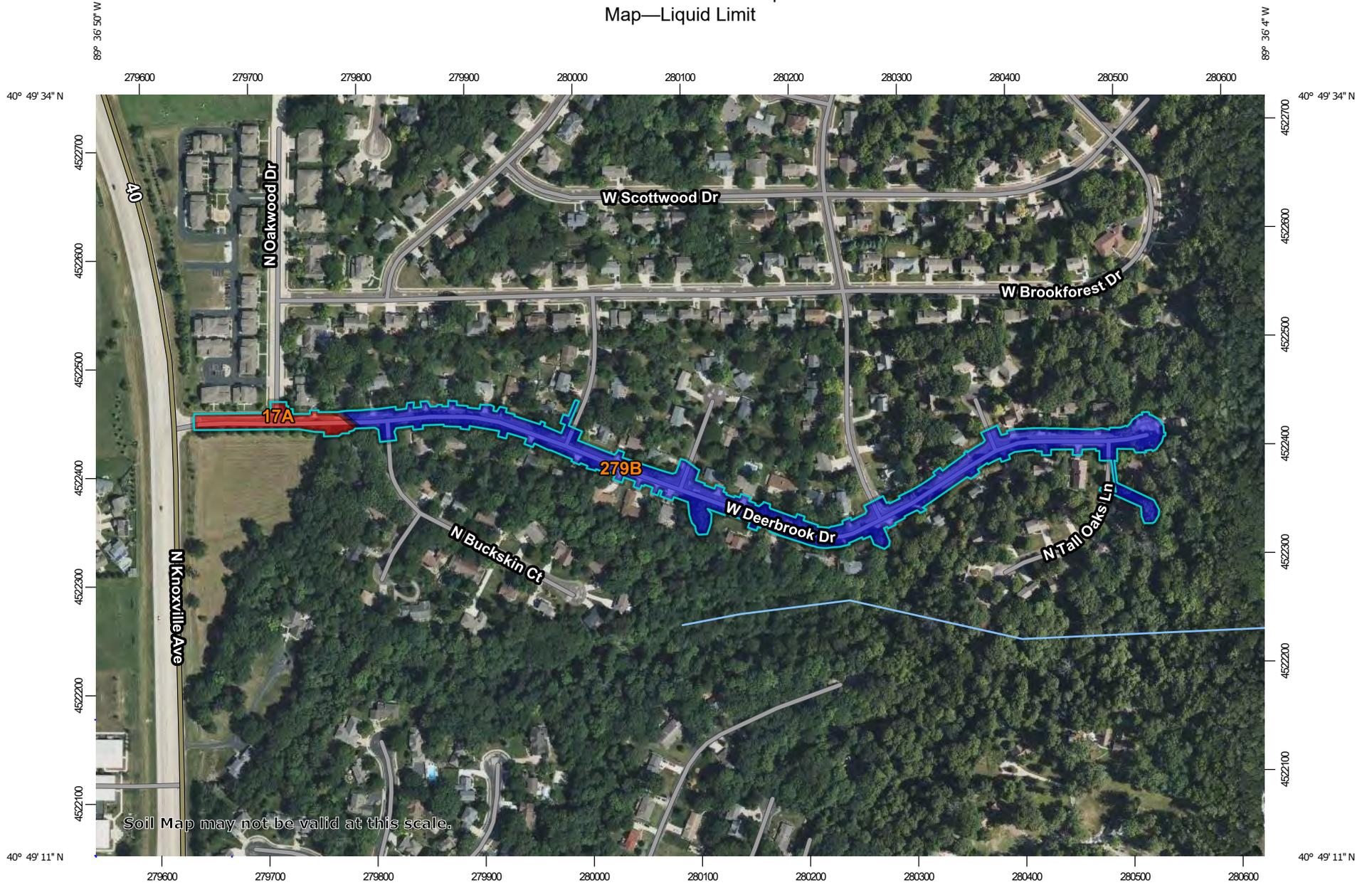
Liquid Limit

Liquid limit (LL) is one of the standard Atterberg limits used to indicate the plasticity characteristics of a soil. It is the water content, on a percent by weight basis, of the soil (passing #40 sieve) at which the soil changes from a plastic to a liquid state. Generally, the amount of clay- and silt-size particles, the organic matter content, and the type of minerals determine the liquid limit. Soils that have a high liquid limit have the capacity to hold a lot of water while maintaining a plastic or semisolid state.

Liquid limit is used in classifying soils in the Unified and AASHTO classification systems.

For each soil layer, this attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

Custom Soil Resource Report Map—Liquid Limit



Map Scale: 1:4,940 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

-  <= 31.0
-  > 31.0 and <= 32.2
-  Not rated or not available

Soil Rating Lines

-  <= 31.0
-  > 31.0 and <= 32.2
-  Not rated or not available

Soil Rating Points

-  <= 31.0
-  > 31.0 and <= 32.2
-  Not rated or not available

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

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Soil Survey Area: Peoria County, Illinois
 Survey Area Data: Version 18, Aug 28, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 14, 2020—Aug 20, 2020

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Table—Liquid Limit

Map unit symbol	Map unit name	Rating (percent)	Acres in AOI	Percent of AOI
17A	Keomah silt loam, 0 to 2 percent slopes	31.0	0.6	11.9%
279B	Rozetta silt loam, 2 to 5 percent slopes	32.2	4.7	88.1%
Totals for Area of Interest			5.3	100.0%

Rating Options—Liquid Limit

Units of Measure: percent

Aggregation Method: Dominant Component

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Interpret Nulls as Zero: No

Layer Options (Horizon Aggregation Method): Depth Range (Weighted Average)

Top Depth: 0

Bottom Depth: 10

Units of Measure: Inches

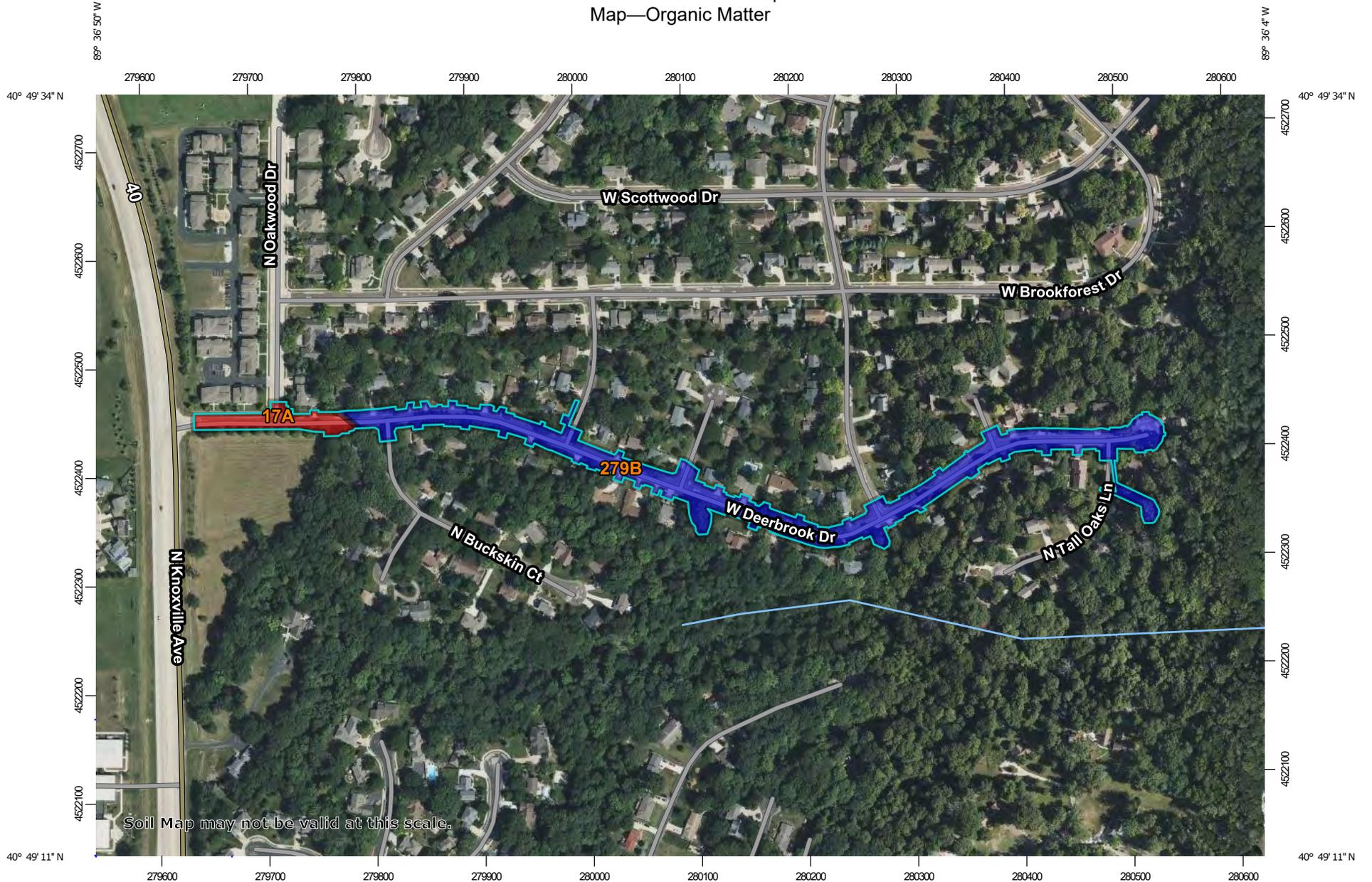
Organic Matter

Organic matter is the plant and animal residue in the soil at various stages of decomposition. The estimated content of organic matter is expressed as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of organic matter in a soil can be maintained by returning crop residue to the soil. Organic matter has a positive effect on available water capacity, water infiltration, soil organism activity, and tilth. It is a source of nitrogen and other nutrients for crops and soil organisms. An irregular distribution of organic carbon with depth may indicate different episodes of soil deposition or soil formation. Soils that are very high in organic matter have poor engineering properties and subside upon drying.

For each soil layer, this attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

Custom Soil Resource Report Map—Organic Matter



Map Scale: 1:4,940 if printed on A landscape (11" x 8.5") sheet.

0 50 100 200 300 Meters

0 200 400 800 1200 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

-  <= 1.46
-  > 1.46 and <= 1.59
-  Not rated or not available

Soil Rating Lines

-  <= 1.46
-  > 1.46 and <= 1.59
-  Not rated or not available

Soil Rating Points

-  <= 1.46
-  > 1.46 and <= 1.59
-  Not rated or not available

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Peoria County, Illinois
 Survey Area Data: Version 18, Aug 28, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 14, 2020—Aug 20, 2020

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Table—Organic Matter

Map unit symbol	Map unit name	Rating (percent)	Acres in AOI	Percent of AOI
17A	Keomah silt loam, 0 to 2 percent slopes	1.46	0.6	11.9%
279B	Rozetta silt loam, 2 to 5 percent slopes	1.59	4.7	88.1%
Totals for Area of Interest			5.3	100.0%

Rating Options—Organic Matter

Units of Measure: percent

Aggregation Method: Dominant Component

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Interpret Nulls as Zero: No

Layer Options (Horizon Aggregation Method): Depth Range (Weighted Average)

Top Depth: 0

Bottom Depth: 10

Units of Measure: Inches

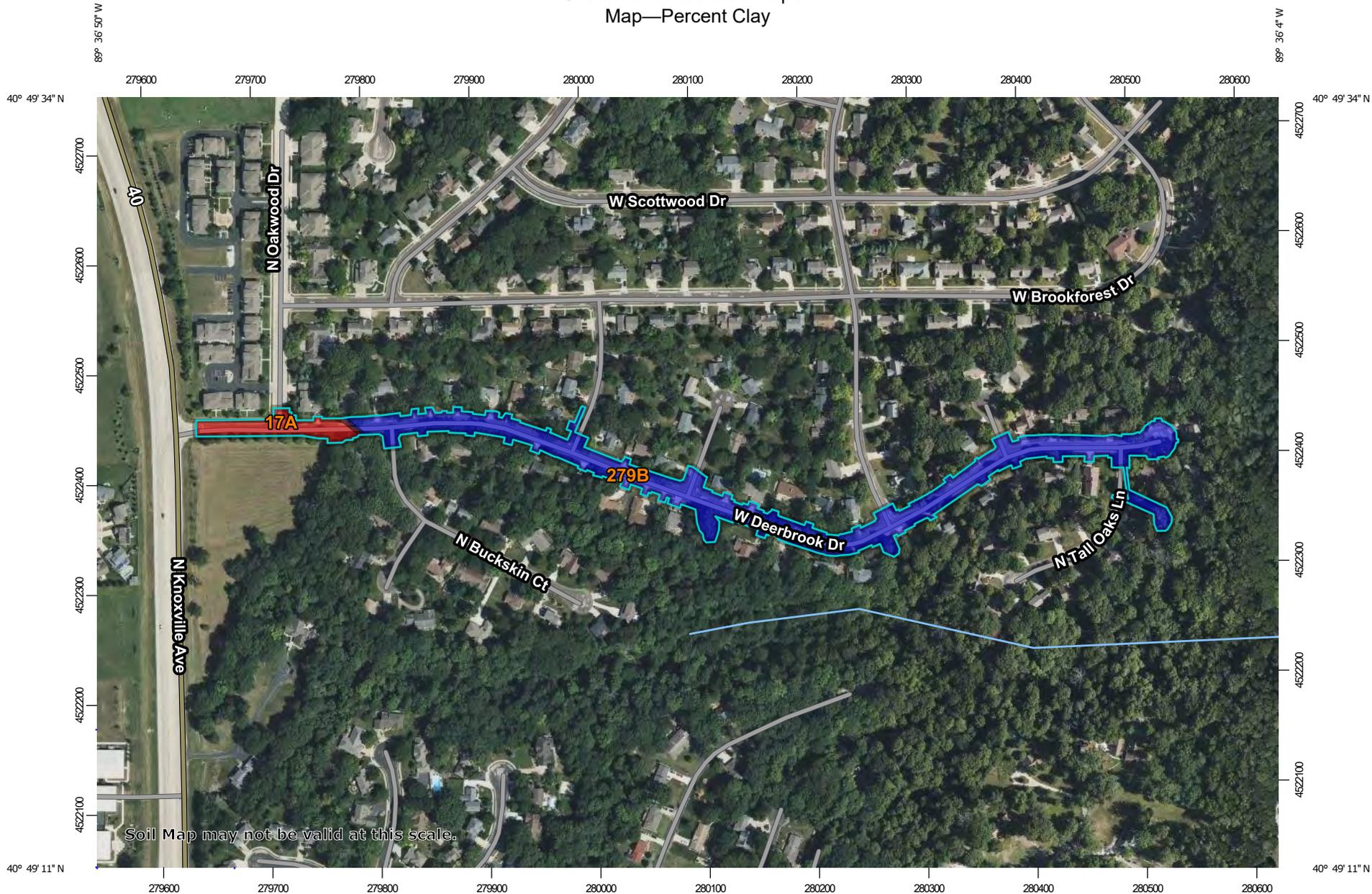
Percent Clay

Clay as a soil separate consists of mineral soil particles that are less than 0.002 millimeter in diameter. The estimated clay content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter. The amount and kind of clay affect the fertility and physical condition of the soil and the ability of the soil to adsorb cations and to retain moisture. They influence shrink-swell potential, saturated hydraulic conductivity (Ksat), plasticity, the ease of soil dispersion, and other soil properties. The amount and kind of clay in a soil also affect tillage and earth-moving operations.

Most of the material is in one of three groups of clay minerals or a mixture of these clay minerals. The groups are kaolinite, smectite, and hydrous mica, the best known member of which is illite.

For each soil layer, this attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

Custom Soil Resource Report Map—Percent Clay



Map Scale: 1:4,940 if printed on A landscape (11" x 8.5") sheet.

0 50 100 200 300 Meters

0 200 400 800 1200 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

-  <= 17.6
-  > 17.6 and <= 19.0
-  Not rated or not available

Soil Rating Lines

-  <= 17.6
-  > 17.6 and <= 19.0
-  Not rated or not available

Soil Rating Points

-  <= 17.6
-  > 17.6 and <= 19.0
-  Not rated or not available

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

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Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

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Table—Percent Clay

Map unit symbol	Map unit name	Rating (percent)	Acres in AOI	Percent of AOI
17A	Keomah silt loam, 0 to 2 percent slopes	17.6	0.6	11.9%
279B	Rozetta silt loam, 2 to 5 percent slopes	19.0	4.7	88.1%
Totals for Area of Interest			5.3	100.0%

Rating Options—Percent Clay

Units of Measure: percent

Aggregation Method: Dominant Component

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Interpret Nulls as Zero: No

Layer Options (Horizon Aggregation Method): Depth Range (Weighted Average)

Top Depth: 0

Bottom Depth: 10

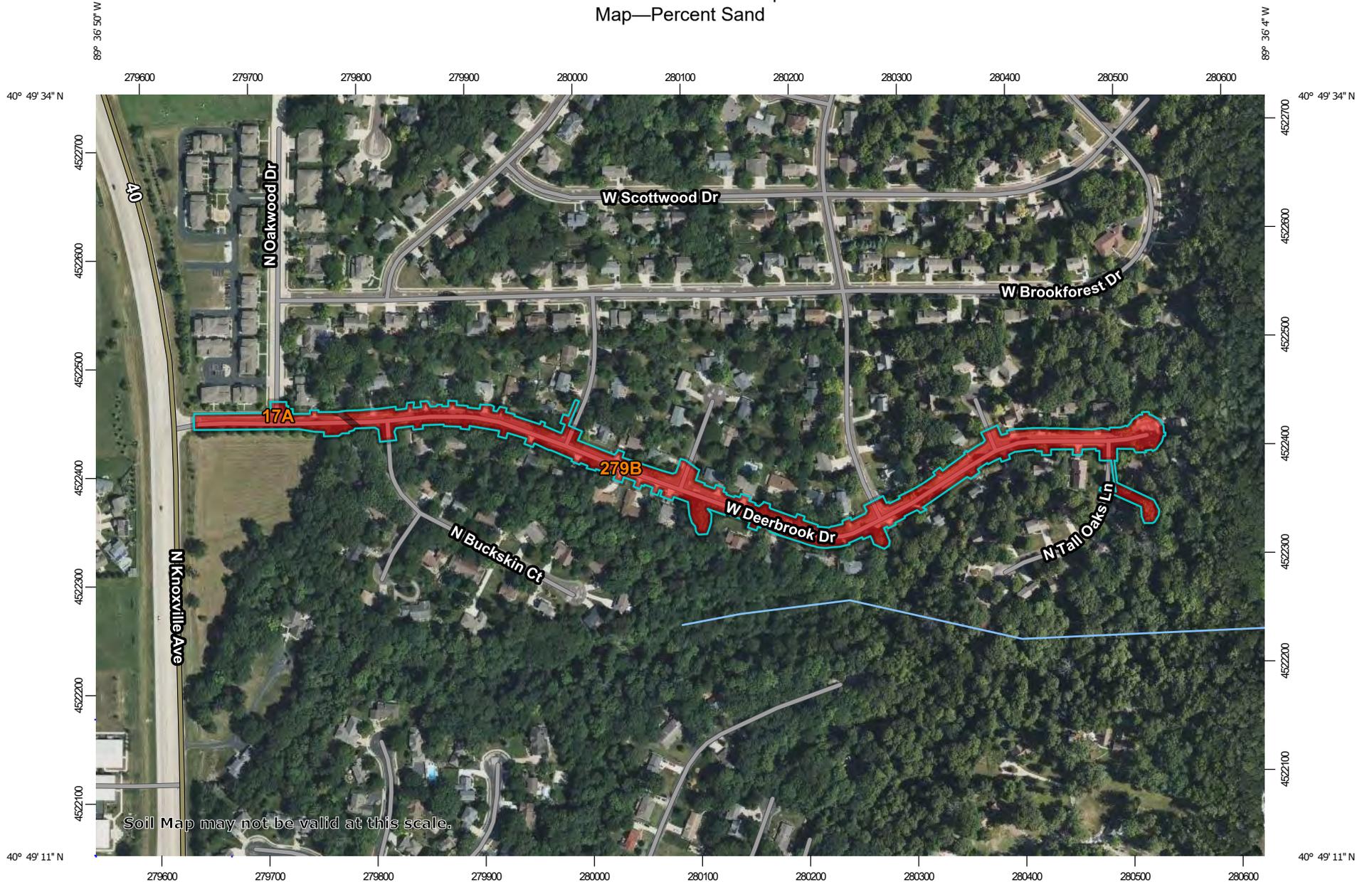
Units of Measure: Inches

Percent Sand

Sand as a soil separate consists of mineral soil particles that are 0.05 millimeter to 2 millimeters in diameter. In the database, the estimated sand content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter. The content of sand, silt, and clay affects the physical behavior of a soil. Particle size is important for engineering and agronomic interpretations, for determination of soil hydrologic qualities, and for soil classification.

For each soil layer, this attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

Custom Soil Resource Report
Map—Percent Sand



Soil Map may not be valid at this scale.

Map Scale: 1:4,940 if printed on A landscape (11" x 8.5") sheet.

0 50 100 200 300 Meters

0 200 400 800 1200 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

 = 4.0

 Not rated or not available

Soil Rating Lines

 = 4.0

 Not rated or not available

Soil Rating Points

 = 4.0

 Not rated or not available

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

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Warning: Soil Map may not be valid at this scale.

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Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

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Date(s) aerial images were photographed: Aug 14, 2020—Aug 20, 2020

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Table—Percent Sand

Map unit symbol	Map unit name	Rating (percent)	Acres in AOI	Percent of AOI
17A	Keomah silt loam, 0 to 2 percent slopes	4.0	0.6	11.9%
279B	Rozetta silt loam, 2 to 5 percent slopes	4.0	4.7	88.1%
Totals for Area of Interest			5.3	100.0%

Rating Options—Percent Sand

Units of Measure: percent

Aggregation Method: Dominant Component

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Interpret Nulls as Zero: No

Layer Options (Horizon Aggregation Method): Depth Range (Weighted Average)

Top Depth: 0

Bottom Depth: 10

Units of Measure: Inches

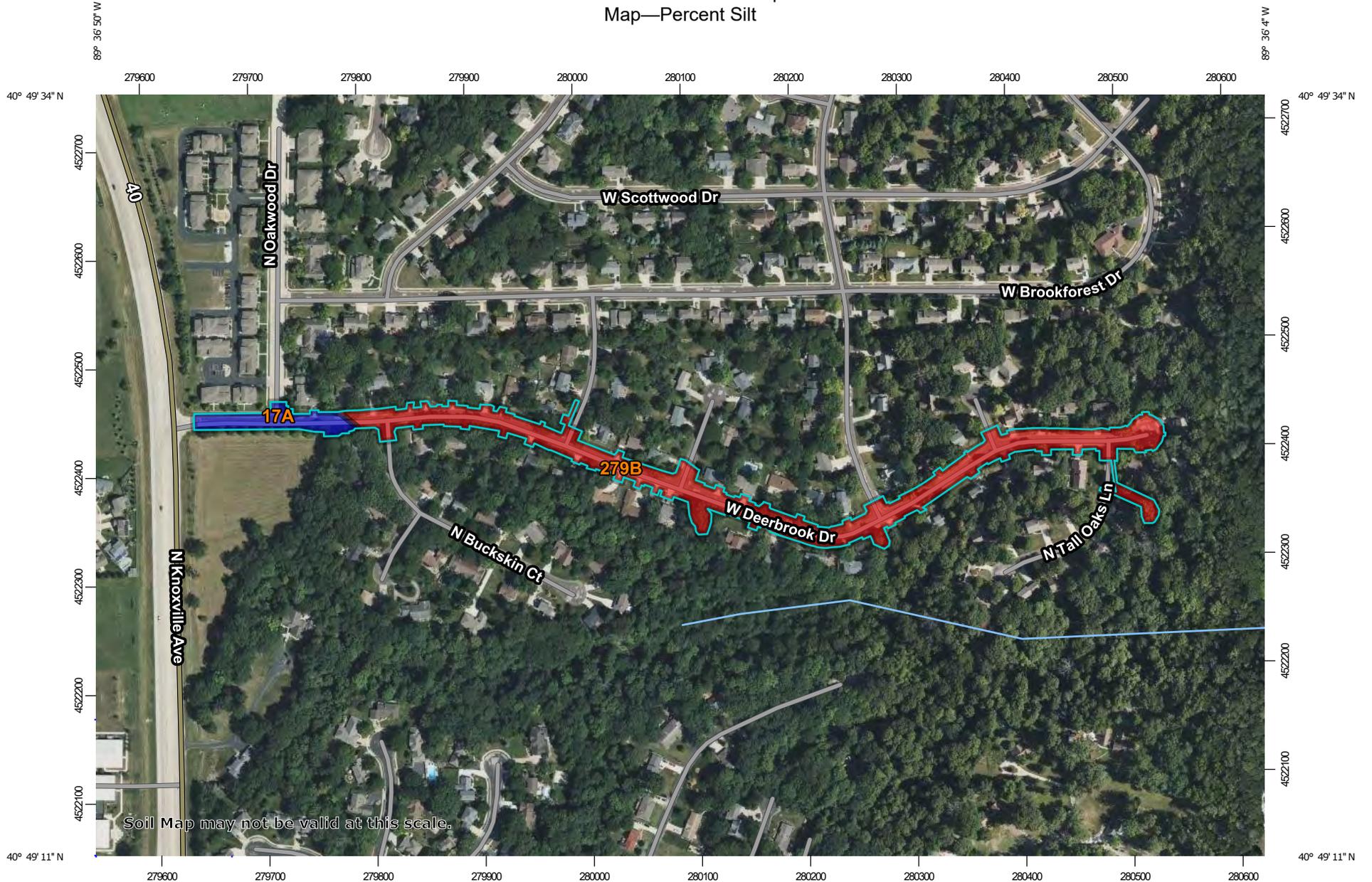
Percent Silt

Silt as a soil separate consists of mineral soil particles that are 0.002 to 0.05 millimeter in diameter. In the database, the estimated silt content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

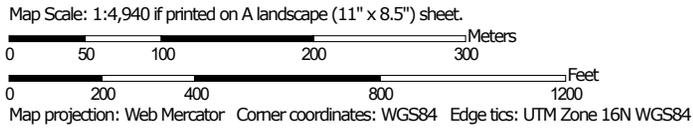
The content of sand, silt, and clay affects the physical behavior of a soil. Particle size is important for engineering and agronomic interpretations, for determination of soil hydrologic qualities, and for soil classification

For each soil layer, this attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

Custom Soil Resource Report Map—Percent Silt



Soil Map may not be valid at this scale.



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

 <= 77.0

 > 77.0 and <= 78.4

 Not rated or not available

Soil Rating Lines

 <= 77.0

 > 77.0 and <= 78.4

 Not rated or not available

Soil Rating Points

 <= 77.0

 > 77.0 and <= 78.4

 Not rated or not available

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

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Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

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Table—Percent Silt

Map unit symbol	Map unit name	Rating (percent)	Acres in AOI	Percent of AOI
17A	Keomah silt loam, 0 to 2 percent slopes	78.4	0.6	11.9%
279B	Rozetta silt loam, 2 to 5 percent slopes	77.0	4.7	88.1%
Totals for Area of Interest			5.3	100.0%

Rating Options—Percent Silt

Units of Measure: percent

Aggregation Method: Dominant Component

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Interpret Nulls as Zero: No

Layer Options (Horizon Aggregation Method): Depth Range (Weighted Average)

Top Depth: 0

Bottom Depth: 10

Units of Measure: Inches

Plasticity Index

Plasticity index (PI) is one of the standard Atterberg limits used to indicate the plasticity characteristics of a soil. It is defined as the numerical difference between the liquid limit and plastic limit of the soil. It is the range of water content in which a soil exhibits the characteristics of a plastic solid.

The plastic limit is the water content that corresponds to an arbitrary limit between the plastic and semisolid states of a soil. The liquid limit is the water content, on a percent by weight basis, of the soil (passing #40 sieve) at which the soil changes from a plastic to a liquid state.

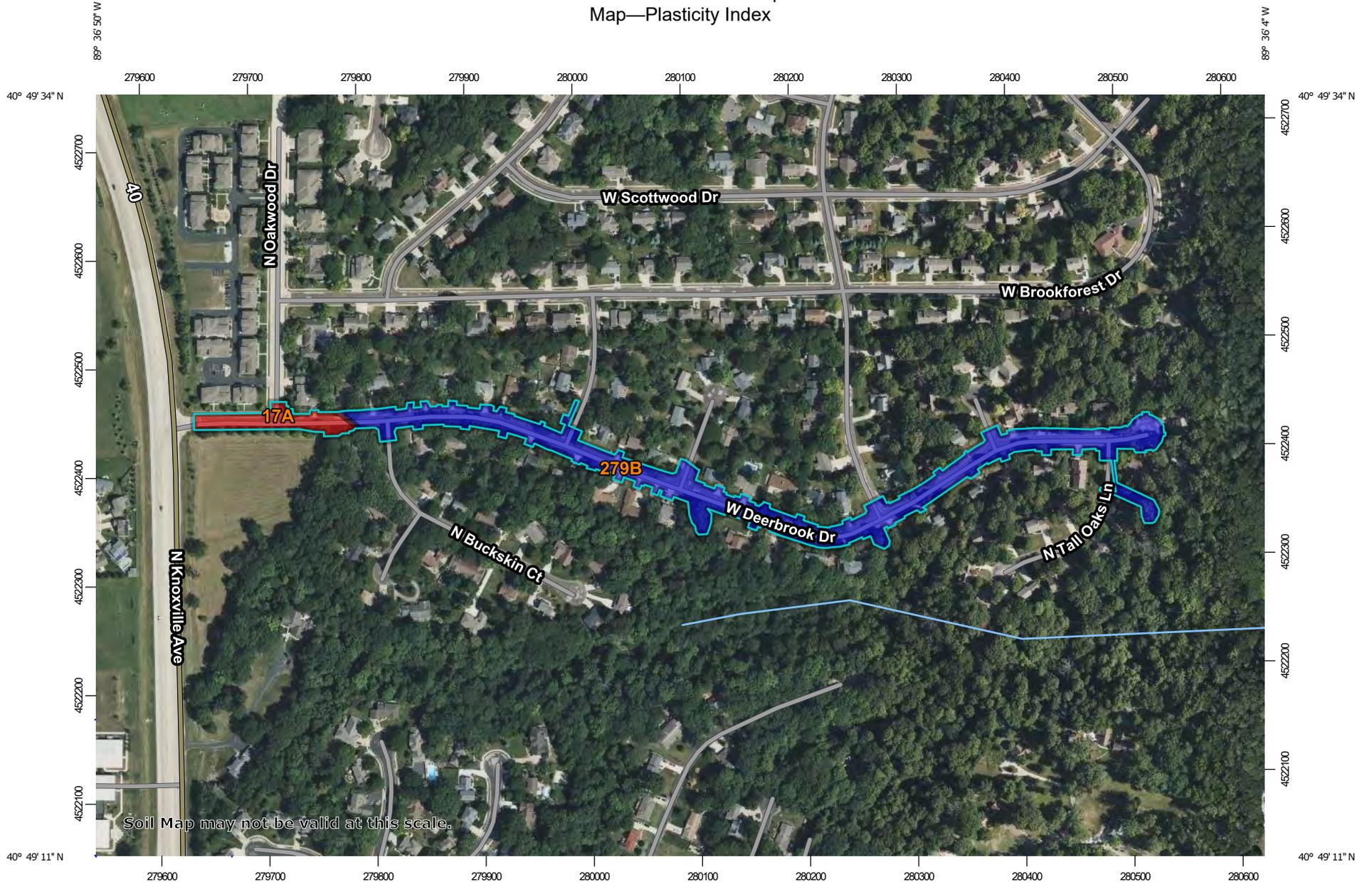
Soils that have a high plasticity index have a wide range of moisture content in which the soil performs as a plastic material. Highly and moderately plastic clays have large PI values. Plasticity index is used in classifying soils in the Unified and AASHTO classification systems.

For each soil layer, this attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this

Custom Soil Resource Report

attribute for the component. For this soil property, only the representative value is used.

Custom Soil Resource Report Map—Plasticity Index



Map Scale: 1:4,940 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

-  <= 11.2
-  > 11.2 and <= 12.3
-  Not rated or not available

Soil Rating Lines

-  <= 11.2
-  > 11.2 and <= 12.3
-  Not rated or not available

Soil Rating Points

-  <= 11.2
-  > 11.2 and <= 12.3
-  Not rated or not available

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

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Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

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Table—Plasticity Index

Map unit symbol	Map unit name	Rating (percent)	Acres in AOI	Percent of AOI
17A	Keomah silt loam, 0 to 2 percent slopes	11.2	0.6	11.9%
279B	Rozetta silt loam, 2 to 5 percent slopes	12.3	4.7	88.1%
Totals for Area of Interest			5.3	100.0%

Rating Options—Plasticity Index

Units of Measure: percent

Aggregation Method: Dominant Component

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Interpret Nulls as Zero: No

Layer Options (Horizon Aggregation Method): Depth Range (Weighted Average)

Top Depth: 0

Bottom Depth: 10

Units of Measure: Inches

Saturated Hydraulic Conductivity (Ksat)

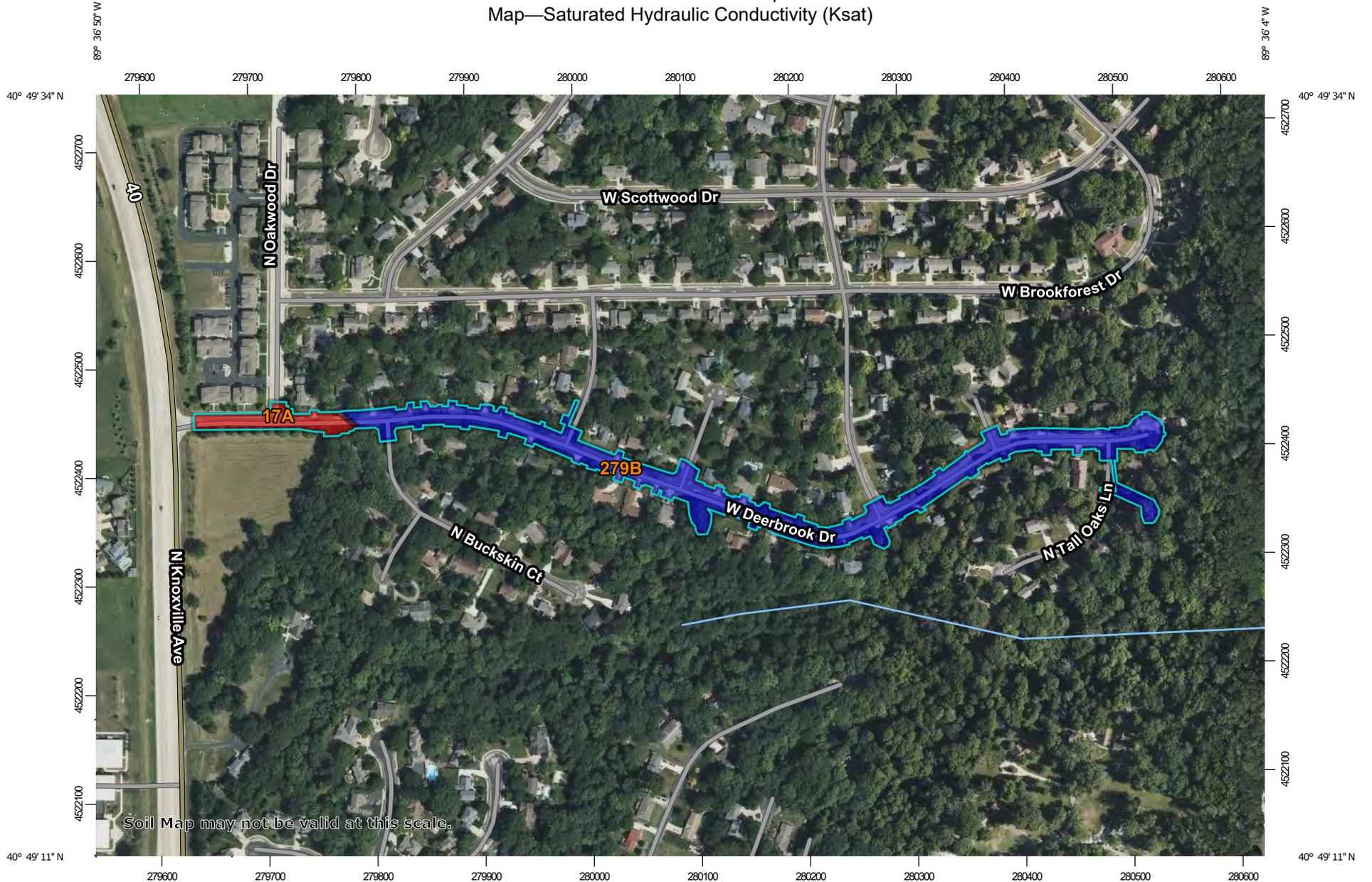
Saturated hydraulic conductivity (Ksat) refers to the ease with which pores in a saturated soil transmit water. The estimates are expressed in terms of micrometers per second. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Saturated hydraulic conductivity is considered in the design of soil drainage systems and septic tank absorption fields.

For each soil layer, this attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

The numeric Ksat values have been grouped according to standard Ksat class limits.

Custom Soil Resource Report

Map—Saturated Hydraulic Conductivity (Ksat)



Map Scale: 1:4,940 if printed on A landscape (11" x 8.5") sheet.

0 50 100 200 300 Meters

0 200 400 800 1200 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

 <= 6.6300

 > 6.6300 and <= 9.1700

 Not rated or not available

Soil Rating Lines

 <= 6.6300

 > 6.6300 and <= 9.1700

 Not rated or not available

Soil Rating Points

 <= 6.6300

 > 6.6300 and <= 9.1700

 Not rated or not available

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

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Please rely on the bar scale on each map sheet for map measurements.

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 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

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Table—Saturated Hydraulic Conductivity (Ksat)

Map unit symbol	Map unit name	Rating (micrometers per second)	Acres in AOI	Percent of AOI
17A	Keomah silt loam, 0 to 2 percent slopes	6.6300	0.6	11.9%
279B	Rozetta silt loam, 2 to 5 percent slopes	9.1700	4.7	88.1%
Totals for Area of Interest			5.3	100.0%

Rating Options—Saturated Hydraulic Conductivity (Ksat)

Units of Measure: micrometers per second

Aggregation Method: Dominant Component

Component Percent Cutoff: None Specified

Tie-break Rule: Fastest

Interpret Nulls as Zero: No

Layer Options (Horizon Aggregation Method): Depth Range (Weighted Average)

Top Depth: 0

Bottom Depth: 10

Units of Measure: Inches

Saturated Hydraulic Conductivity (Ksat), Standard Classes

Saturated hydraulic conductivity (Ksat) refers to the ease with which pores in a saturated soil transmit water. The estimates are expressed in terms of micrometers per second. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Saturated hydraulic conductivity is considered in the design of soil drainage systems and septic tank absorption fields.

For each soil layer, this attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

The numeric Ksat values have been grouped according to standard Ksat class limits. The classes are:

Very low: 0.00 to 0.01

Custom Soil Resource Report

Low: 0.01 to 0.1

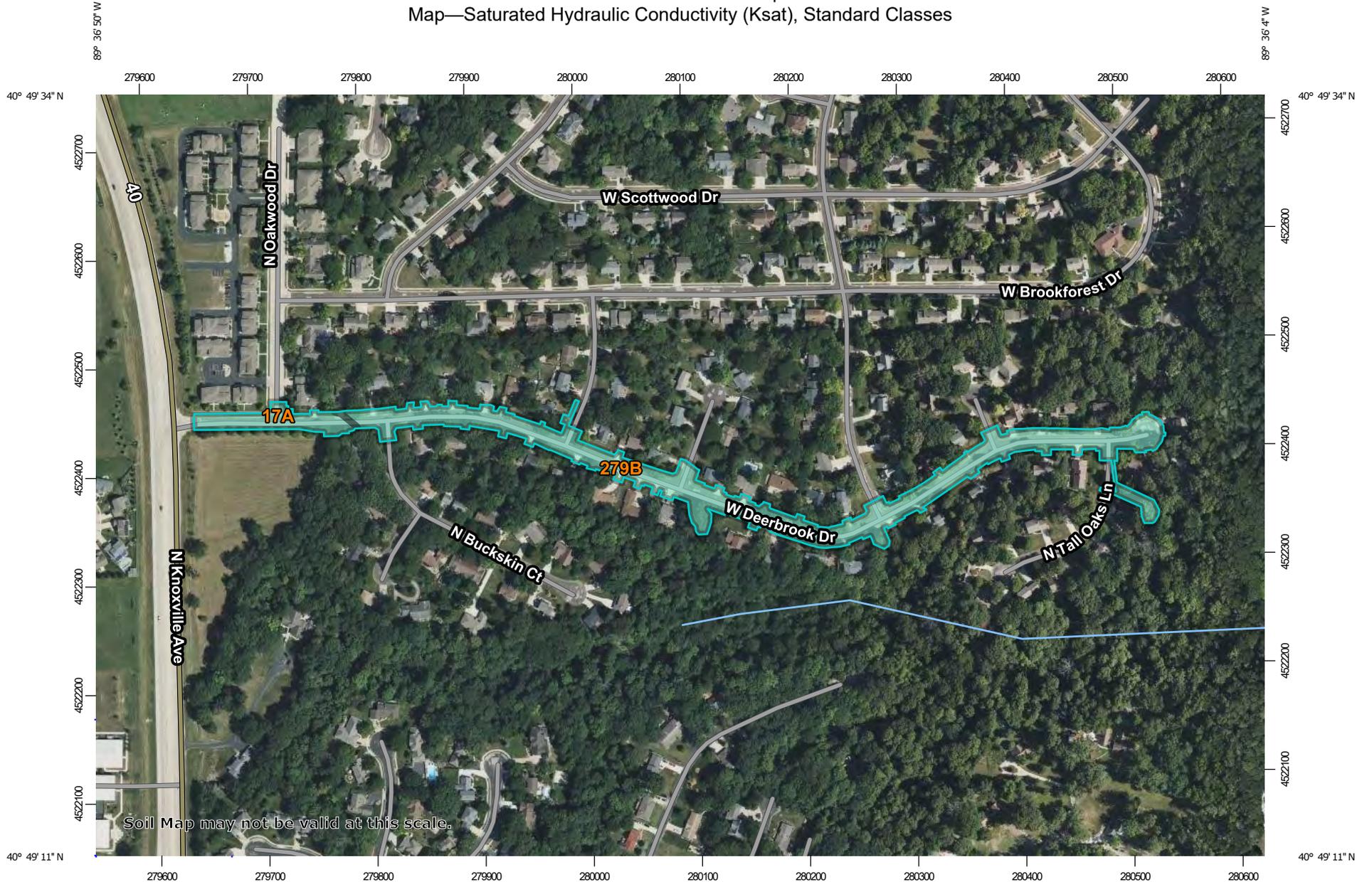
Moderately low: 0.1 to 1.0

Moderately high: 1 to 10

High: 10 to 100

Very high: 100 to 705

Custom Soil Resource Report
Map—Saturated Hydraulic Conductivity (Ksat), Standard Classes



Soil Map may not be valid at this scale.

Map Scale: 1:4,940 if printed on A landscape (11" x 8.5") sheet.

0 50 100 200 300 Meters

0 200 400 800 1200 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

MAP LEGEND

- Area of Interest (AOI)**
 -  Area of Interest (AOI)
- Soils**
 - Soil Rating Polygons**
 -  Very Low (0.0 - 0.01)
 -  Low (0.01 - 0.1)
 -  Moderately Low (0.1 - 1)
 -  Moderately High (1 - 10)
 -  High (10 - 100)
 -  Very High (100 - 705)
 -  Not rated or not available
 - Soil Rating Lines**
 -  Very Low (0.0 - 0.01)
 -  Low (0.01 - 0.1)
 -  Moderately Low (0.1 - 1)
 -  Moderately High (1 - 10)
 -  High (10 - 100)
 -  Very High (100 - 705)
 -  Not rated or not available
 - Soil Rating Points**
 -  Very Low (0.0 - 0.01)
 -  Low (0.01 - 0.1)
 -  Moderately Low (0.1 - 1)
 -  Moderately High (1 - 10)
 -  High (10 - 100)
 -  Very High (100 - 705)
- Water Features**
 -  Streams and Canals
- Transportation**
 -  Rails
 -  Interstate Highways
 -  US Routes
 -  Major Roads
 -  Local Roads
- Background**
 -  Aerial Photography
-  Not rated or not available

MAP INFORMATION

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Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

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Table—Saturated Hydraulic Conductivity (Ksat), Standard Classes

Map unit symbol	Map unit name	Rating (micrometers per second)	Acres in AOI	Percent of AOI
17A	Keomah silt loam, 0 to 2 percent slopes	6.6300	0.6	11.9%
279B	Rozetta silt loam, 2 to 5 percent slopes	9.1700	4.7	88.1%
Totals for Area of Interest			5.3	100.0%

Rating Options—Saturated Hydraulic Conductivity (Ksat), Standard Classes

Units of Measure: micrometers per second

Aggregation Method: Dominant Component

Component Percent Cutoff: None Specified

Tie-break Rule: Fastest

Interpret Nulls as Zero: No

Layer Options (Horizon Aggregation Method): Depth Range (Weighted Average)

Top Depth: 0

Bottom Depth: 10

Units of Measure: Inches

Soil Qualities and Features

Soil qualities are behavior and performance attributes that are not directly measured, but are inferred from observations of dynamic conditions and from soil properties. Example soil qualities include natural drainage, and frost action. Soil features are attributes that are not directly part of the soil. Example soil features include slope and depth to restrictive layer. These features can greatly impact the use and management of the soil.

AASHTO Group Classification (Surface)

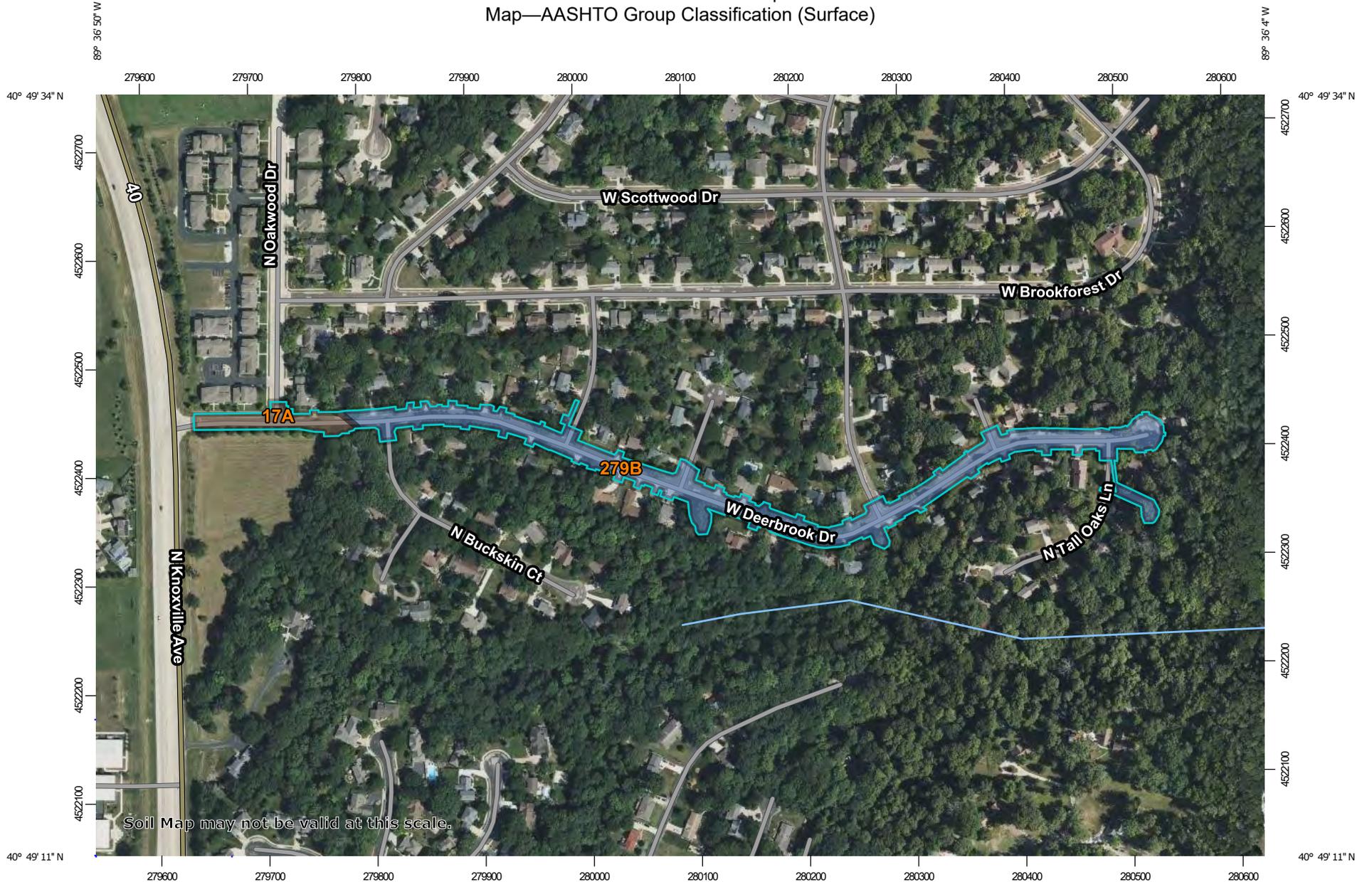
AASHTO group classification is a system that classifies soils specifically for geotechnical engineering purposes that are related to highway and airfield construction. It is based on particle-size distribution and Atterberg limits, such as liquid limit and plasticity index. This classification system is covered in AASHTO Standard No. M 145-82. The classification is based on that portion of the soil that is smaller than 3 inches in diameter.

Custom Soil Resource Report

The AASHTO classification system has two general classifications: (i) granular materials having 35 percent or less, by weight, particles smaller than 0.074 mm in diameter and (ii) silt-clay materials having more than 35 percent, by weight, particles smaller than 0.074 mm in diameter. These two divisions are further subdivided into seven main group classifications, plus eight subgroups, for a total of fifteen for mineral soils. Another class for organic soils is used.

For each soil horizon in the database one or more AASHTO Group Classifications may be listed. One is marked as the representative or most commonly occurring. The representative classification is shown here for the surface layer of the soil.

Custom Soil Resource Report
Map—AASHTO Group Classification (Surface)



Map Scale: 1:4,940 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

-  A-1
-  A-1-a
-  A-1-b
-  A-2
-  A-2-4
-  A-2-5
-  A-2-6
-  A-2-7
-  A-3
-  A-4
-  A-5
-  A-6
-  A-7
-  A-7-5
-  A-7-6
-  A-8
-  Not rated or not available

Soil Rating Lines

-  A-1
-  A-1-a
-  A-1-b
-  A-2

-  A-2-4
-  A-2-5
-  A-2-6
-  A-2-7
-  A-3
-  A-4
-  A-5
-  A-6
-  A-7
-  A-7-5
-  A-7-6
-  A-8
-  Not rated or not available

Soil Rating Points

-  A-1
-  A-1-a
-  A-1-b
-  A-2
-  A-2-4
-  A-2-5
-  A-2-6
-  A-2-7
-  A-3
-  A-4
-  A-5
-  A-6

-  A-7
-  A-7-5
-  A-7-6
-  A-8
-  Not rated or not available

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Peoria County, Illinois
 Survey Area Data: Version 18, Aug 28, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 14, 2020—Aug 20, 2020

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Table—AASHTO Group Classification (Surface)

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
17A	Keomah silt loam, 0 to 2 percent slopes	A-4	0.6	11.9%
279B	Rozetta silt loam, 2 to 5 percent slopes	A-6	4.7	88.1%
Totals for Area of Interest			5.3	100.0%

Rating Options—AASHTO Group Classification (Surface)

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

Layer Options (Horizon Aggregation Method): Surface Layer (Not applicable)

Depth to Bedrock

The term bedrock in soil survey refers to a continuous root and water restrictive layer of rock that occurs within the soil profile.

There are many types of restrictions that can occur within the soil profile but this theme only includes the three restrictions that use the term bedrock. These are:

- 1) Lithic Bedrock
- 2) Paralithic Bedrock
- 3) Densic Bedrock

Lithic bedrock and paralithic bedrock are comprised of igneous, metamorphic, and sedimentary rocks, which are coherent and consolidated into rock through pressure, heat, cementation, or fusion. Lithic bedrock represents the hardest type of bedrock, with a hardness of strongly coherent to indurated. Paralithic bedrock has a hardness of extremely weakly coherent to moderately coherent. It can occur as a thin layer of weathered bedrock above harder lithic bedrock. Paralithic bedrock can also be much thicker, extending well below the soil profile.

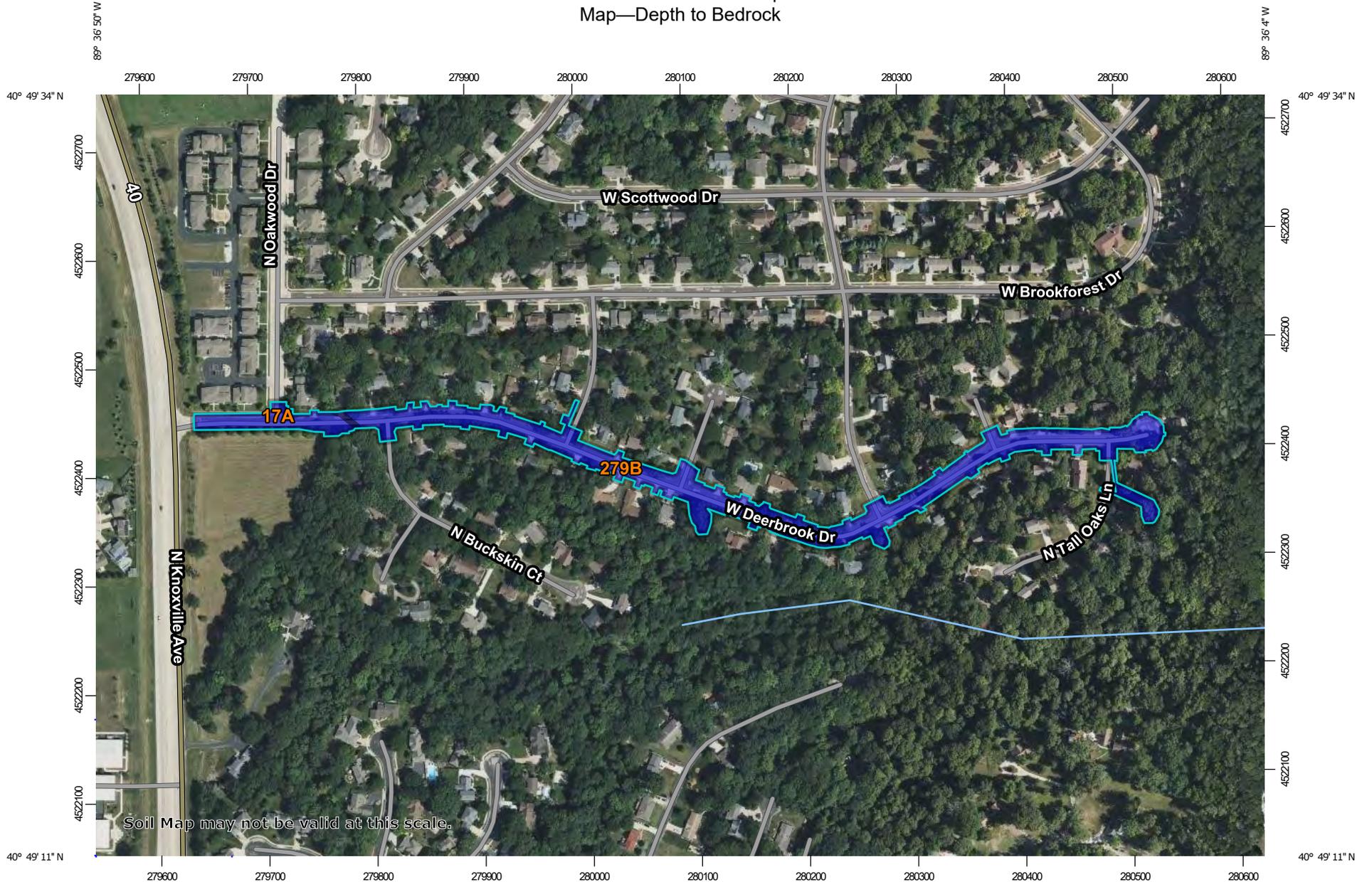
Densic bedrock represents a unique kind of bedrock recognized within the soil survey. It is non-coherent and consolidated, dense root restrictive material, formed by pressure, heat, and dewatering of earth materials or sediments. Densic bedrock differs from densic materials, which formed under the compaction of glaciers, mudflows, and or human-caused compaction.

Custom Soil Resource Report

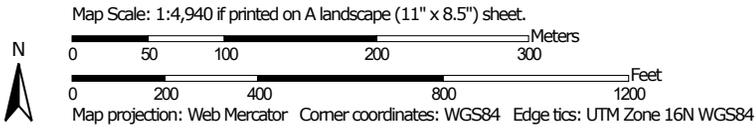
If more than one type of bedrock is described for an individual soil type, the depth to the shallowest one is given. If no bedrock is described in a map unit, it is represented by the "greater than 200" depth class.

Depth to bedrock is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

Custom Soil Resource Report Map—Depth to Bedrock



Soil Map may not be valid at this scale.



MAP LEGEND

- Area of Interest (AOI)**
 -  Area of Interest (AOI)
- Soils**
 - Soil Rating Polygons**
 -  0 - 25
 -  25 - 50
 -  50 - 100
 -  100 - 150
 -  150 - 200
 -  > 200
 -  Not rated or not available
 - Soil Rating Lines**
 -  0 - 25
 -  25 - 50
 -  50 - 100
 -  100 - 150
 -  150 - 200
 -  > 200
 -  Not rated or not available
 - Soil Rating Points**
 -  0 - 25
 -  25 - 50
 -  50 - 100
 -  100 - 150
 -  150 - 200
 -  > 200
- Water Features**
 -  Streams and Canals
- Transportation**
 -  Rails
 -  Interstate Highways
 -  US Routes
 -  Major Roads
 -  Local Roads
- Background**
 -  Aerial Photography
-  Not rated or not available

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

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 Survey Area Data: Version 18, Aug 28, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 14, 2020—Aug 20, 2020

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Table—Depth to Bedrock

Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
17A	Keomah silt loam, 0 to 2 percent slopes	>200	0.6	11.9%
279B	Rozetta silt loam, 2 to 5 percent slopes	>200	4.7	88.1%
Totals for Area of Interest			5.3	100.0%

Rating Options—Depth to Bedrock

Units of Measure: centimeters

Aggregation Method: Dominant Component

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

Interpret Nulls as Zero: No

Hydrologic Soil Group

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

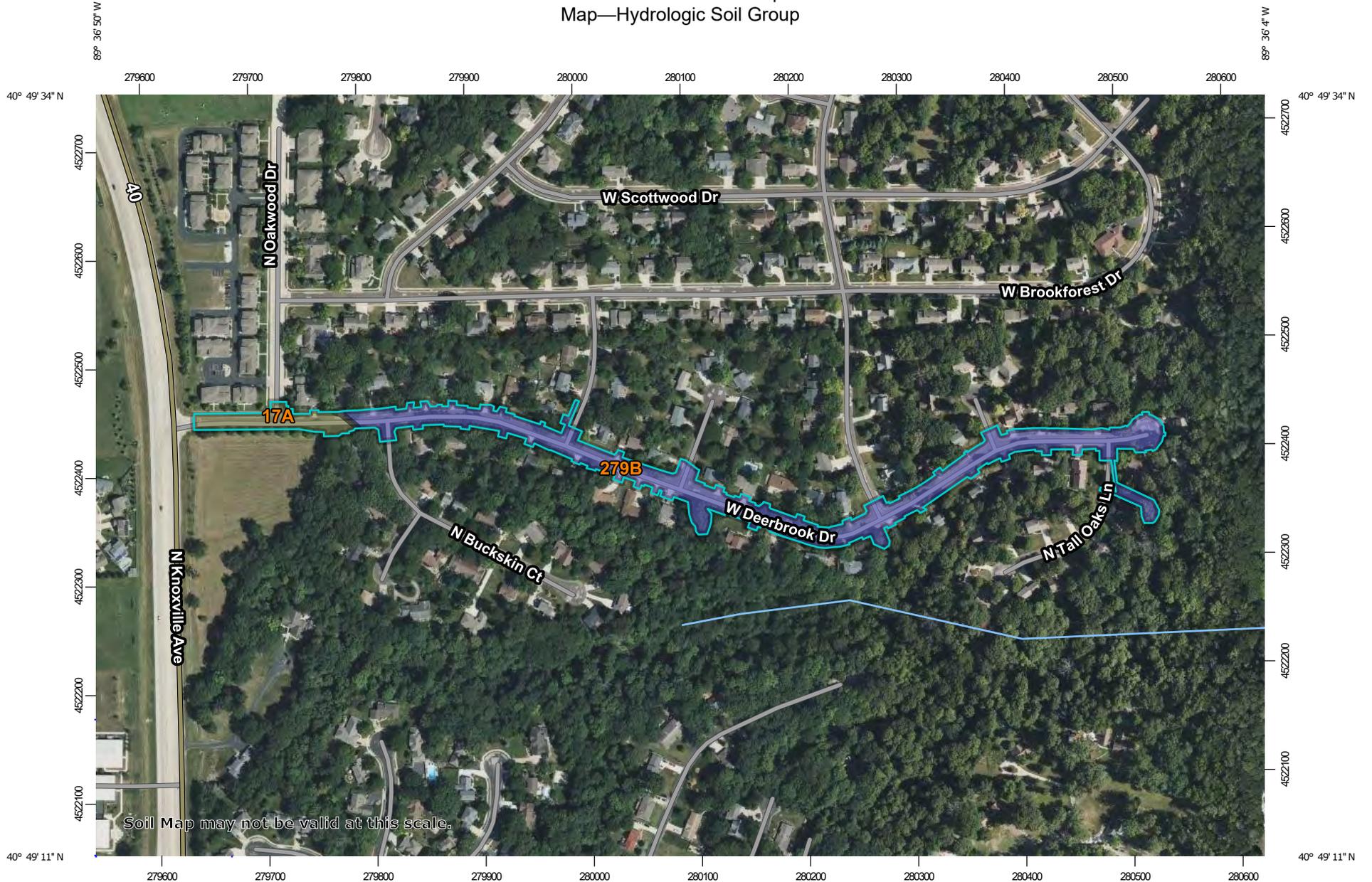
Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell

Custom Soil Resource Report

potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Custom Soil Resource Report Map—Hydrologic Soil Group



Map Scale: 1:4,940 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

-  A
-  A/D
-  B
-  B/D
-  C
-  C/D
-  D
-  Not rated or not available

Soil Rating Lines

-  A
-  A/D
-  B
-  B/D
-  C
-  C/D
-  D
-  Not rated or not available

Soil Rating Points

-  A
-  A/D
-  B
-  B/D

-  C
-  C/D
-  D
-  Not rated or not available

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

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Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

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 Survey Area Data: Version 18, Aug 28, 2023

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Date(s) aerial images were photographed: Aug 14, 2020—Aug 20, 2020

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Table—Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
17A	Keomah silt loam, 0 to 2 percent slopes	C/D	0.6	11.9%
279B	Rozetta silt loam, 2 to 5 percent slopes	B	4.7	88.1%
Totals for Area of Interest			5.3	100.0%

Rating Options—Hydrologic Soil Group

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Water Features

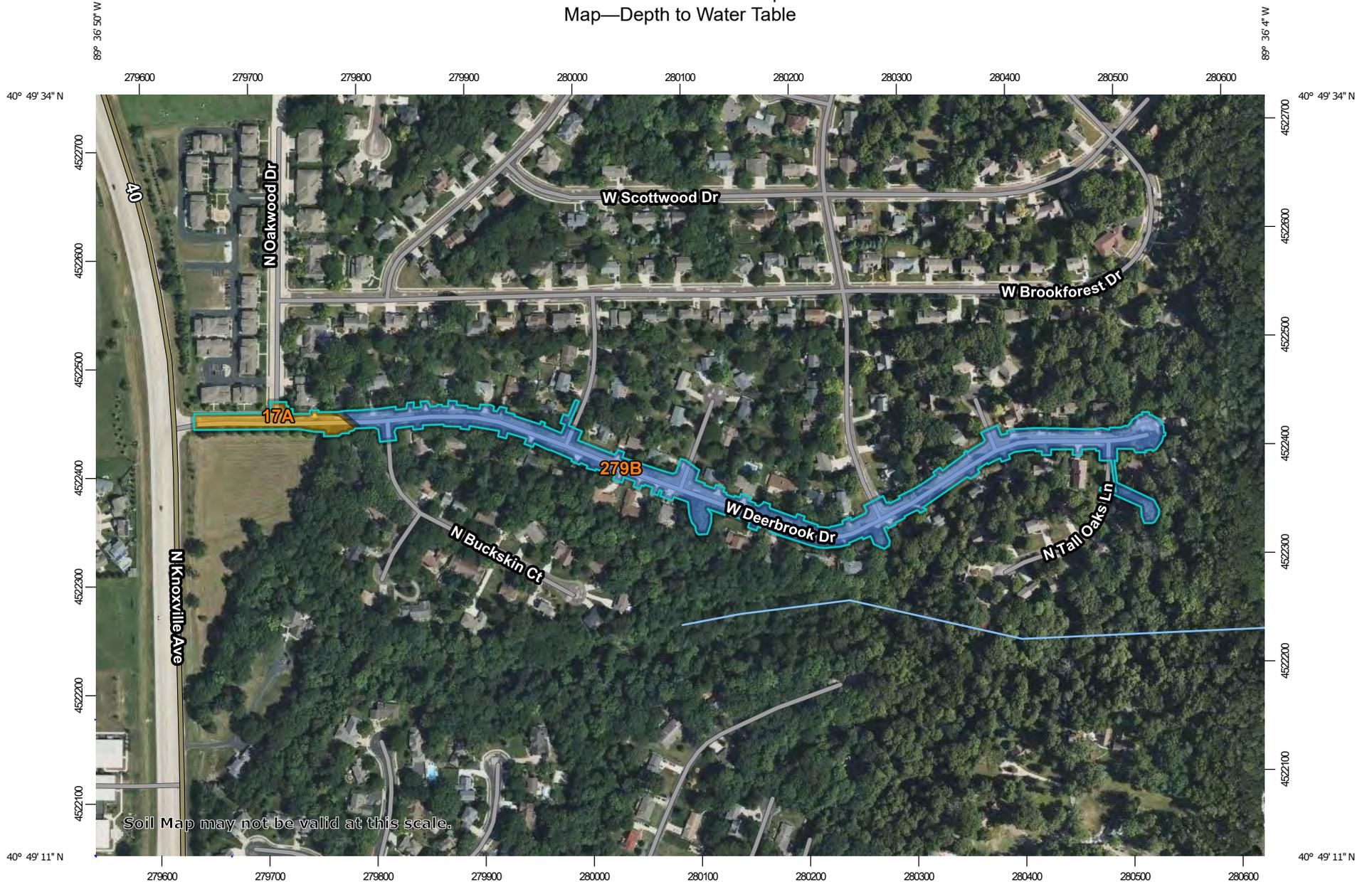
Water Features include ponding frequency, flooding frequency, and depth to water table.

Depth to Water Table

"Water table" refers to a saturated zone in the soil. It occurs during specified months. Estimates of the upper limit are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely grayish colors (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered a water table.

This attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

Custom Soil Resource Report Map—Depth to Water Table



Map Scale: 1:4,940 if printed on A landscape (11" x 8.5") sheet.

0 50 100 200 300 Meters

0 200 400 800 1200 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

MAP LEGEND

- Area of Interest (AOI)**
 -  Area of Interest (AOI)
- Soils**
 - Soil Rating Polygons**
 -  0 - 25
 -  25 - 50
 -  50 - 100
 -  100 - 150
 -  150 - 200
 -  > 200
 -  Not rated or not available
 - Soil Rating Lines**
 -  0 - 25
 -  25 - 50
 -  50 - 100
 -  100 - 150
 -  150 - 200
 -  > 200
 -  Not rated or not available
 - Soil Rating Points**
 -  0 - 25
 -  25 - 50
 -  50 - 100
 -  100 - 150
 -  150 - 200
 -  > 200
- Water Features**
 -  Streams and Canals
- Transportation**
 -  Rails
 -  Interstate Highways
 -  US Routes
 -  Major Roads
 -  Local Roads
- Background**
 -  Aerial Photography
-  Not rated or not available

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

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Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

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Table—Depth to Water Table

Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
17A	Keomah silt loam, 0 to 2 percent slopes	38	0.6	11.9%
279B	Rozetta silt loam, 2 to 5 percent slopes	153	4.7	88.1%
Totals for Area of Interest			5.3	100.0%

Rating Options—Depth to Water Table

Units of Measure: centimeters

Aggregation Method: Dominant Component

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

Interpret Nulls as Zero: No

Beginning Month: January

Ending Month: December

Ecological Sites

Individual soil map unit components can be correlated to a particular ecological site. The Ecological Site Assessment section includes ecological site descriptions, plant growth curves, state and transition models, and selected National Plants database information.

All Ecological Sites —

An "ecological site" is the product of all the environmental factors responsible for its development. It has characteristic soils that have developed over time; a characteristic hydrology, particularly infiltration and runoff, that has developed over time; and a characteristic plant community (kind and amount of vegetation). The vegetation, soils, and hydrology are all interrelated. Each is influenced by the others and influences the development of the others. For example, the hydrology of the site is influenced by development of the soil and plant community. The plant community on an ecological site is typified by an association of species that differs from that of other ecological sites in the kind and/or proportion of species or in total production.

An ecological site name provides a general description of a particular ecological site. For example, "Loamy Upland" is the name of a rangeland ecological site. An "ecological site ID" is the symbol assigned to a particular ecological site.

The map identifies the dominant ecological site for each map unit, aggregated by dominant condition. Other ecological sites may occur within each map unit. Each map unit typically consists of one or more components (soils and/or miscellaneous areas). Each soil component is associated with an ecological site. Miscellaneous areas, such as rock outcrop, sand dunes, and badlands, have little or no soil material and support little or no vegetation and therefore are not linked to an ecological site. The table below the map lists all of the ecological sites for each map unit component in your area of interest.

Custom Soil Resource Report Map—Dominant Ecological Site



Map Scale: 1:4,940 if printed on A landscape (11" x 8.5") sheet.

0 50 100 200 300 Meters

0 200 400 800 1200 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

-  F095XB010WI
-  F115XC005IL
-  Not rated or not available

Soil Rating Lines

-  F095XB010WI
-  F115XC005IL
-  Not rated or not available

Soil Rating Points

-  F095XB010WI
-  F115XC005IL
-  Not rated or not available

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

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Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

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Table—Ecological Sites by Map Unit Component

Map unit symbol	Map unit name	Component name (percent)	Ecological site	Acres in AOI	Percent of AOI
17A	Keomah silt loam, 0 to 2 percent slopes	Keomah (90%)	F115XC005IL — Loess Upland Forest	0.6	11.9%
		Rozetta (5%)	F115XC005IL — Loess Upland Forest		
		Denny (2%)	R108XB009IL — Poned Loess Sedge Meadow		
		Rushville (2%)	F115XC006IL — Loess Upland Flatwoods		
		Sable (1%)	R108XB009IL — Poned Loess Sedge Meadow		
279B	Rozetta silt loam, 2 to 5 percent slopes	Rozetta (90%)	F095XB010WI — Loamy and Clayey Upland	4.7	88.1%
		Clarksdale (3%)	R115XC004IL — Loess Upland Savanna		
		Keomah (3%)	F115XC005IL — Loess Upland Forest		
		Sable (2%)	R108XB008IL — Wet Loess Upland Prairie		
		Stronghurst (2%)	F095XB005WI — Moist Loamy or Clayey Lowland		
Totals for Area of Interest				5.3	100.0%

Soil Reports

The Soil Reports section includes various formatted tabular and narrative reports (tables) containing data for each selected soil map unit and each component of each unit. No aggregation of data has occurred as is done in reports in the Soil Properties and Qualities and Suitabilities and Limitations sections.

The reports contain soil interpretive information as well as basic soil properties and qualities. A description of each report (table) is included.

AOI Inventory

This folder contains a collection of tabular reports that present a variety of soil information. Included are various map unit description reports, special soil interpretation reports, and data summary reports.

Component Legend

This report presents general information about the map units and map unit components in the selected area. It shows map unit symbols and names and the components in each map unit. It also shows the percent of the components in the map units, the kind of component, and the slope range of each component.

Report—Component Legend

Component Legend—Peoria County, Illinois							
Map unit symbol and name	Map unit acres	Pct. of map unit	Component name	Component kind	Pct. slope		
					Low	RV	High
17A—Keomah silt loam, 0 to 2 percent slopes	22,268						
		90	Keomah	Series	0.0	0.9	2.0
279B—Rozetta silt loam, 2 to 5 percent slopes	43,021						
		90	Rozetta	Series	2.0	4.0	5.0

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- United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084>

Custom Soil Resource Report

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

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United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf